

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

NOVEMBER 1, 1938



Clematis Lawsoniana

**Root Hardwood Cuttings with Acids
From Arboretum to the Nursery
New and Uncommon Perennials
Lists of Best French Lilacs**

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

F. R. KILNER, Editor

Published Semi-monthly by

AMERICAN NURSERYMAN
PUBLISHING CO.

508 S. Dearborn Street.

Chicago, Ill.

Telephone: Wabash 8191

New York Office—67 West 44th Street

N. L. Huebsch Tel. Murray Hill 2-4871

Entered as second-class matter December 11, 1933, at the post office at Chicago, Ill., under the act of March 3, 1879.

SUBSCRIPTION PRICE, \$1.00 per year; outside United States, \$1.50. Single copies, 10c.

ADVERTISING RATES on application. Forms close on 10th of month for mid-month issue and on 25th of previous month for first-of-month issue. If proofs are wanted, copy should be on hand one week earlier.

TABLE OF CONTENTS 24

INDEX TO ADVERTISERS 26

WAGES AND HOURS LAW.

Office employees, such as stenographers, bookkeepers, stock men and clerical help, appear to be the only group on the nurseryman's staff which is affected by the wages and hours law which went into effect October 24.

The definitions issued by Administrator Andrews October 19 supported the interpretation of the provisions of the law published on page 19 of the October 15 issue of the American Nurseryman.

Packing house labor is undoubtedly within the definition of the act as handlers of horticultural products, according to the opinion expressed by Richard P. White, executive secretary of the American Association of Nurserymen. He adds, "The only question now remaining to be solved is the classification of office employees, such as stock men, bookkeepers, stenographers and clerical staff. It is my contention that, since the administrator has ruled that this group of employees is essential to the production process of industry and therefore included in both wage and hour provisions of the act, the same group of employees is likewise essential to the product of our agricultural industry and therefore exempt on the same basis of reasoning." If this contention is upheld, not even the office staff of nurserymen will come under the provisions of the law, but nurserymen who wish to play safe will adjust their clerical staff to meet both wage and hour provisions of the act, keeping records to show compliance.

The Mirror of the Trade

DON'T FEAR ELM DISEASE.

Elm trees may continue to be planted in this country, even in the east, in the prospect of the elimination of the Dutch elm disease, according to Dr. J. H. Faull, of the Arnold Arboretum, who gives an appraisal of the situation in the October 14 issue of the bulletin of popular information. His comments follow a close-up of the situation on a visit made to the New York area by Dr. Faull and Dr. J. S. Boyce, professor of forest pathology at Yale University, in the middle of September. Only in that area is the work dragging, which elsewhere has largely eradicated the disease.

Better planning of the eradication program and scouting by expert workers rather than by persons on relief rolls are urged to check the disease.

In answer to the question as to continued planting of elms, put to most nurserymen by their customers, Dr. Faull concludes with the following statement:

"As a result of the fear aroused by the Dutch elm disease situation in America, some people have come to question the advisability of planting elms. The answer, especially for the eastern part of the country, is reached through an appraisal of the prospect that the disease will be eliminated. In my judgment, we can safely continue to plant elms. It is unthinkable, in view of the demonstrated possibilities of success in eradication, that the American people will abandon efforts to save one of the finest gifts of nature. Given the opportunity, I still think we can preserve our elms. But provision for that opportunity rests immediately on federal and state governments, and primarily on the insistence brought to bear by the public on those who represent them in those governments. The cost to try to save our elms is relatively small. On the other hand, if we let them go, the costs will be greater to this generation, and a noble heritage will no longer be ours to pass on to succeeding generations. Everyone can help at the moment by urgent spoken or written words, and now is the critical time for action."

CLEMATIS LAWSONIANA.

Lawsoniana is a delicate blue hybrid clematis with an overtone of mauve, an outstanding blending of colors. The flowers are large, formed by broad overlapping petals, and are carried on vigorous plants over a long season—June to September. A lovely specimen can be seen on the front cover. The blooms appear on the growing summer shoots; thus, rather severe pruning in spring can be practiced when this is necessary. It is generally best to be sparing in pruning, however.

This clematis, as well as most of the other large-flowered hybrids, should be given a fairly rich and moist soil, but one that is well drained. A soil of alkaline reaction is best, so that lime is often a desirable addition to the growing medium. Also, it is well to plant clematises where they will have a cool root run through the heat of summer. A mulch of leaves or old rotted manure will usually provide desirable conditions.

This hardy climber is best propagated from cuttings of young shoots taken in January or February in a greenhouse or from outdoor plants about the middle of June and rooted in sand in a temperature of 60 to 65 degrees. Best results are obtained in a closed case.

Lawsoniana belongs to the lanuginosa group of hybrids, along with Henryi, Lady Northcliffe, Nelly Moser, Prince Hendrick and Belle of Woking. Henryi was illustrated on the cover of the December 1, 1936, issue of the American Nurseryman and was accompanied by detailed propagating and cultural notes, which are equally applicable to Lawsoniana. This variety should prove hardy in all but the northernmost regions of the country, but should be given the advantage of a sheltered spot and a winter mulch in the severer sections.

FIFTY-FOUR mimeographed sheets, comprising the proceedings of the seventh annual meeting of the Virginia Nurserymen's Association, July 31 to August 2, at Virginia Polytechnic Institute, Blacksburg, have been mailed out to members of the association.

AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
To Make America More Beautiful and Fruitful*

VOL. LXVIII

NOVEMBER 1, 1938

No. 9

Root Hardwood Cuttings with Acids

*Stimulation of Hardwood Cuttings by Means of Synthetic Growth
Substances—By V. T. Stoutemyer, of Bureau of Plant Introduction*

Since hardwood cuttings are handled cheaply, it is unfortunate that so little of the improvement made in recent years in rooting of softwood cuttings is applicable to dormant cuttings. Possibly the greater maturity and more definite tissue specialization of the dormant hardwood cuttings makes them less responsive in general to influences affecting root formation. Nevertheless, the facts here reported show that proper manipulation, in a manner which appears to be commercially practicable, does produce abundant rooting in some species that are ordinarily not rooted as hardwood cuttings.

In brief, the seemingly new and important modification of treatment now reported consists in applying the growth substances after, instead of before, the callusing of the hardwood cuttings. Results secured in this manner with several subjects were outstanding, but the range of applicability is still to be determined. Some species failed to respond to the treatment.

The shipmast locust, *Robinia Pseudoacacia rectissima*, was studied in greatest detail. This variety produces seeds only rarely, and its vegetative propagation has been confined largely to root cuttings, which have been little used commercially.

The shipmast locust has become important in certain phases of land utilization and conservation work. The plant material used in these experiments was furnished by the section of hill culture research of the soil conservation service.

Hardwood cuttings for these ex-

periments were taken from tops of vigorous 2-year-old root sprouts and from 7-year-old stump sprouts in one of the "original" groves of shipmast locust on Long island. The cuttings were made from six to eight inches long and were bundled in lots of twenty-five each and fastened by two No. 32 rubber bands. The cuttings were handled in these bundles until potted or lined out in the nursery. This simple device greatly increased the number of cuttings which could be handled with the space and time available.

In the earlier trials the cuttings were callused and rooted by standing the bases two or three inches deep in sand, held at 68 degrees Fahrenheit or above, in open greenhouse benches provided with bottom heat. The greenhouse was maintained at a night temperature of approximately 60 degrees with slightly higher day temperatures. Later a special callusing box with electrical heating was found convenient. The cuttings were packed in moist sphagnum and were placed in the box, which was held at about 68 to 70 degrees.

In the preliminary studies, made entirely in the greenhouse, treatment of freshly made cuttings with indole butyric acid at twenty milligrams per liter failed to increase rooting above the scanty amount occurring in the untreated checks. This concentration has often been expressed as a "20-unit solution" in commercial practice and has given excellent results with a wide variety of softwood cuttings. At higher concentrations—eighty and 160 milligrams per liter, or units—rooting was fairly abun-

dant, but injury to the base was too common. When, however, the cuttings were allowed to develop callus before the treatments were applied, good rooting occurred, together with freedom from injury.

In the first field planting test, cuttings made April 7, 1938, were callused at approximately 68 to 70 degrees in the callusing box until April 13, when they received the treatment with growth substance. After the treatment the cuttings were packed in boxes of moist sphagnum and placed in a cool nursery storage until they were planted in the nursery April 25. A few lots were set aside April 24 and given an additional treatment with a two per cent solution of ordinary cane sugar for twenty-four hours previous to planting. The results, as set forth in table I, were somewhat unsatisfactory. It may be pointed out that these figures represent only plants which actually grew. The summarized averages shown in table I are based on 875 cuttings.

TABLE I

Per Cent of Rooting in Direct Field Planting of Cuttings Immediately Following Treatment of Precallused Cuttings. (Expressed in terms of established plants)

Treatment	Without after-treatment	With after-treatment of sucrose
None	1	—
Indole butyric acid, 100 milligrams per liter for 24 hours	13	14
Naphthalene acetic acid in talc dust, one part per thousand	1	11
Indole butyric acid in talc dust, one part per thousand	4	4

In the second field planting, the method was changed to the extent of holding the cuttings at 70 degrees for a week after treatment. These cuttings were made from wood collected on Long island March 30 and stored in a cool nursery storage until used. They were callused in the usual manner for one week and were treated April 28. After the treatment the cuttings were packed closely together in moist sand and kept at 70 degrees until May 6, when they were planted outside. A few lots were removed May 5 and given a 24-hour treatment with a two per cent sucrose solution before planting. When the cuttings were lined out, the roots were beginning to emerge, as indicated by pointed protuberances on the callus. Although this planting was set when soil temperatures were somewhat higher than those attending the first planting, the major portion of the difference is undoubtedly attributable to the advanced stage of root formation at the time of planting, since identical lots of the cuttings used in the first field planting had failed to grow in open ground beds in the greenhouse where soil temperatures were higher than they were outdoors. The results of the second outdoor plantings are shown in table II. The data are taken from averages of rooting based on a total of 1,300 cuttings, using twenty-five in each lot and numerous replications within each treatment.

These results show clearly the superiority of the cuttings of larger diameter and indicate the greater value of naphthalene acetic acid, as compared with indole butyric acid,

for the stimulation of locust cuttings. An example of the typical rooting obtained with this species is shown in the illustration of locust cuttings on this page. The use of the sucrose treatment gave slight increases in rooting. As might be expected, the growth in the irrigated frame was more rapid, although the growth of the field plantings was satisfactory and would result in smaller, more compact trees desirable for certain purposes. For consistent results in rooting year after year, probably the plantings should be located under some form of overhead irrigation in many localities. The cuttings planted in the unirrigated nursery went through one period of drought a short time after planting, followed immediately by a period of more than average rainfall.

Tests with various species indicated that this method is probably suitable for use with a wide range of plants, although a number of complete failures were encountered. For instance, no hardwood cuttings of the Delicious apple rooted, though 500 cuttings were given the treatment with some variations. The application of any kind of aqueous solution to the callus of hardwood cuttings of apple was injurious. No rooting was obtained with *Juglans nigra*, *Castanea mollissima*, *C. crenata* and *C. Henryi*. Cuttings of all these species callused quickly and abundantly and usually remained in excellent condition over long periods of time, but never formed roots.

On the other hand, although hardwood cuttings of varieties of pecans formed scanty callus at a relatively slow rate, they formed

TABLE III

Per Cent of Rooting of Pecan Hardwood Cuttings Following Precallusing Treatment

Treatment	Medium-sized Cutting	Large Cutting
None		
Variety-Posey	0	0
Indole butyric acid at 100 milligrams per liter for 24 hours.		
Variety-Posey	44	63
Indole butyric acid at 100 milligrams per liter for 24 hours.		
Variety-Major	44	58

abundant roots under greenhouse conditions when given the delayed treatment with growth substances. These cuttings established new roots and shoots when potted in a sandy soil mixture, but planting these rooted cuttings directly in outdoor frames under lath shade resulted in large losses, possibly because of the brittleness and fragility of the roots. Like the shipmast locust, the pecan failed to respond to a treatment with indole butyric acid in aqueous solution at twenty parts per million, but roots were formed readily at concentrations above eighty parts per million. The cuttings were made of 2 to 4-year-old wood and were graded on the basis of the approximate diameters of the cuttings. Some preliminary trials had shown that age of wood was not an important factor in rooting. In this trial the cuttings were graded in two sizes. The illustration of Greenriver pecan cuttings on this page shows the type of rooting obtained in the greenhouse with hardwood pecan cuttings. The medium size included those with diameters approximately equal to that of an ordinary lead pencil and larger cuttings were at least one-half inch or more in diameter. The cuttings used in this experiment were made April 4 and 5 and removed from the callusing case April 28 for treatment. They were then placed in sand with bottom heat at 70 degrees with the bundles intact. All lots comprised twenty-five cuttings and 1,100 in all were used in this test. Table III shows the rooting obtained under various conditions in this test.

These results at least suggest the desirability of further study.

The important steps in this method of handling hardwood cuttings may be summarized briefly as follows:

1. The cuttings should be made of

TABLE II

Per Cent of Rooting with Delayed Field Plantings of Shipmast Locust Following Treatments of Precallused Cuttings.

(Expressed in terms of established plants)

Treatment given	Size of cutting	Field plantings		Irrigated frame plantings	
		No after-treatment	Sucrose after-treatment	Without sucrose	With sucrose
Naphthalene acetic acid, 100 milligrams per liter for 24 hours	Large*	64	69	43	61
Naphthalene acetic acid, 100 milligrams per liter for 24 hours	Small**	11	28	40	49
Indole butyric acid, 100 milligrams per liter for 24 hours	Large*	36	42	24	50
Indole butyric acid, 100 milligrams per liter for 24 hours	Small**	0	8	5	11

*Large—Cuttings with diameters over 8 millimeters.

**Small—Cuttings with diameters under 8 millimeters.

firm well ripened wood and, with some subjects, preferably of a somewhat larger diameter than that often used. The age of the wood seemed not to be important.

2. The basal ends of the cuttings should be callused before treatment with aqueous solutions of growth substances.

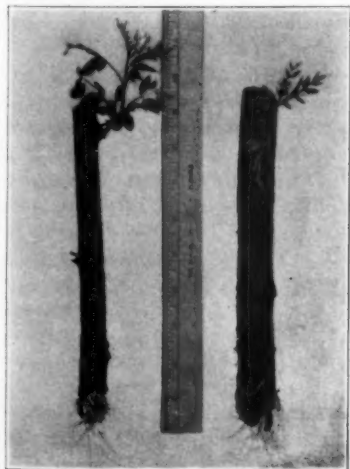
3. The best results are obtained by using a higher concentration of the growth substances than that used for treating softwood cuttings of the same species. With the precallusing treatment there was a marked increase in latitude in concentration of the growth substance and duration of treatment permissible.

4. After the chemical treatment the bases of the bundles of cuttings should be packed in moist sand or sphagnum kept at 68 to 70 degrees. A period of storage for one week before planting is suggested.

5. Planting may be done in the manner of conventional nursery practice. At this time the buds should be breaking into activity and the base should be full of well developed primordia ready to develop roots at once.

Certain variations of this method may be necessary for success in different climates or on different types of soils.

WHERE excessive rains have caused crown rot and other diseases of perennials this season, stock should not be replanted in the same soil, now high in fungous organisms, but the ground should rather be permitted to lie fallow or planted to a cover crop.



Shipmast Locust Cuttings.

(Typical root formation on hardwood cuttings of shipmast locust following application of aqueous solution of naphthalene acetic acid to callused cuttings.)

ANALYSING ADVERTISING

III.

To the nurseryman who wishes to begin advertising the first stumbling block that appears is the preparation of copy. He is likely to go at it by the hard way, groping for an idea or waiting for an inspiration. When it fails to come, he gives up.

Several years ago a rose grower, with the idea that he should engage expert assistance in writing his catalogue, asked an advertising man whom he should employ. "What have you to sell?" asked the advertising man. The rose grower took him out in his fields, pointing out the color of bloom, the texture of foliage and the manner of growth of the varieties they passed in the rows. "What you have been telling me," said the advertising man, "is your best advertising copy. Just put it on paper. Write as you would talk. After it is written, I can dress it up as to grammar and spelling, if necessary, and so can any printer's proofreader. But I could not write advertising copy like that, because I do not know your plants as you know them."

The ability to communicate to prospective buyers your enthusiasm about the plants you have to sell depends more upon that knowledge than your powers of expression. Many successful salesmen get along with a limited vocabulary, but they "know their stuff."

So the first step in the preparation of copy is to put on paper the things you want to tell about your plants or your service or whatever you have to sell. Once that much is done, the process of dressing up the copy is relatively simple. When he has proceeded thus far, the nurseryman may find his interest carrying him along to do the rest of the job. Or he may turn to his printer, the publication he wishes to use or an advertising man to complete the job.

But it should never be forgotten that the most important step is this preparation of the sales message. It should be as individual as possible, to fit your own merchandise or your own business. No amount of fancy

display, art work or color can make effective a lot of empty words or glittering generalities. What the other fellow has done is a poor guide. Your business is your own, just as your individuality is your own. The more you can differentiate yourself from others in your advertising, so as to reflect just what you yourself have to offer, the more successful will be your sales message.

TEAR OUT NUISANCE TREES.

More than 12,000 nuisance trees—thorn apple, wild cherry, red cedar, etc.—this year have been removed from orchard environs in Vermont.

That unsprayed, uncared-for apple trees are pest breeders has been amply demonstrated through the presence of caterpillar hordes last spring. Besides the caterpillar, the apple maggot, curculios, gypsy moth, scale insects, cedar rust and others are among the pests against which the tree removal campaign is designed.

The work is confined to growth in zones closely surrounding well cared-for orchards of commercial size, on land not owned by the orchardists.

Similar projects have been operating in other parts of the country with the aid of the W. P. A. In Colorado and in California, campaigns to eradicate trees infected with the phony peach disease have been operated successfully with relief labor under supervision of entomological experts. In Connecticut, Utah, Idaho and along the Pacific coast, projects have done much toward treatment of white pine blister rust.



Greenriver Pecan Cuttings.

(Root formation on hardwood cuttings of Greenriver pecan after treatment with aqueous solution of indole butyric acid on callused cuttings.)

Business Building

Value of Salesmanship in Building a Business, Told California Convention—By Vic Eckdahl, of Swift & Co.

I'm surprised to see none of you wearing a flower. I have one; wore it because I expected you'd all be wearing one. It seems to me it would be one of your best advertisements. Why not wear them?

I'll begin my talk by telling you about fear and faith. Fear may hurt us, while faith may do a lot of good. It is not well to be too much afraid, too cautious. Like the old man in the smoking compartment of a train, when a young fellow came in and, getting ready to shave, asked the older man "What time is it?" The older man did not answer and the young man asked him again. Still no reply. Then the young man said, "I hope I have done nothing to offend you. Why don't you answer me?" The other man said, "I'm cautious. If I told you the time, pretty soon I'd ask you your name. Then after a while I might open my suitcase and ask you to have a drink. I live only a hundred miles down the way here, and by the time we would get there we might be pretty good friends. I'd probably ask you to stop off and spend a day with me. I'd take you home and my wife would ask you to stay for dinner. Then you might meet my daughter, and as she's an attractive girl, pretty soon you'd be asking me if you could get married. And I'd hate to see her married to a fellow without a wrist watch."

The greatest thing about business today is the business yet to be done. There is a lot of good selling to be done. Knowledge of a product helps. No man gets big in business until he fully realizes how little he can accomplish alone.

No business can be built without spreading knowledge about it by advertising. Nurserymen have a wonderful opportunity to advertise, because they can build romance about their product, and that makes good advertising. If I were in a business that I could not advertise, I'd advertise it for sale.

I like to think of the little ships in the life of a person, or of a business. We watch a ship go out to sea and

we wonder about it—will it get there, will it get back, what will happen on its voyage? Coming to convention, making friendships, the good fellowship and comradeship that abound here is important in business. It builds up your ships, that come back when you need them. Especially in selling you will have a lot of hardship if you try to say, "I can take care of myself." In business there is a "u" and "i," and the "i" is silent. Remember that in selling, the "you" is more important than the "I." The merchant does not have to have your product; the consumer does not have to have it. There are lots of competitive products.

Harold Swift, head of our company, is a regular fellow. In talking to a group of employees in Chicago, he said he had often been asked why Swift & Co. had been successful. He said he believed in giving credit where credit is due and that he had come to the conclusion that it was due to the extraordinary devotion of capable people. One of the sins in business is the capable person not devoted. He should change jobs to one that he can be devoted to.

Selling is a great thing. My mother taught me a lot about it. My father ran a little store, but my mother was a better merchant. She taught me to pour sugar, and I've learned that it pays. Literally she taught me the right WAY to pour sugar—hold it over the barrel when you fill the bag. And she said, when you weigh up four pounds, don't take an 8-pound bag. It does not look like four pounds, and the bag costs twice as much. And whatever you do, she said, when you weigh up potatoes, don't put in four and one-fourth pounds and dig out the extra quarter-pound. Put in three and three-quarter pounds and then throw in the extra potato to bring it up to the weight. This is as true today.

Another thing to remember in selling is that your customer is someone else's prospect, and your prospect is someone else's customer.

Remember, too, that it is great to feel at home in a place of business. Get people to feel that way in your business. Get them to asking you questions rather than do the talking yourself. Be sure that you can answer questions intelligently. Always follow through on a sale, for the satisfied purchaser tells his friends about his purchase. Get to know this group of friends; that's where your "ships" come in. Take salesmanship seriously. Associate with your customers. Build up your ships. Lots of people are only waiting for a sales counselor before they buy. If you have the information on which they can depend, they're your customers.

If you sell a fellow six rose bushes, ask him about their progress. Be interested in them. Have some information that will help him get the best results. Now, I sell hams and shortening, and this is a long way from flowers, but I think every business man in Los Angeles should have flowers on his desk every morning, if only as a reminder to buy flowers to take home or nursery plants for his garden. In conclusion, I'd like to give you a thought to remember: If you fear the future, you will fumble the present.

COURSES IN GARDENING.

The New York Botanical Garden is now offering a certificate to both professional and amateur gardeners who satisfactorily complete the new 2-year course in practical gardening. This new course comprises four lectures and two laboratory subjects in the sciences underlying practical horticulture.

Besides the 2-year course for professional and amateur gardeners, courses are offered to student gardeners who are appointed for a period of two or three years and receive training in practical gardening with an allowance from the garden sufficient to meet ordinary living costs; apprentice gardeners who are appointed for one year and are granted a modest scholarship or may be admitted without compensation and receive training similar to that given student gardeners, and a science course for professional gardeners designed to meet the demands from men engaged in horticultural work for further training in sciences upon which good gardening is founded.

From Arboretum to the Nursery

Concluding Article on Trees and Shrubs Not Frequently Seen Outside Botanical Institutions That Are Deserving Commercial Cultivation—By Leon Croizat, of the Arnold Arboretum

Salix Matsudana, the Hankow willow, despite its well known shortcomings, will always be in demand for purposes of general planting. There is actual need for a reliable, tree-like species that has a more pleasing habit than the narrow-headed, rather stiff *Salix alba*, and is not necessarily weeping, like the numerous hybrids found on the market under the name *Salix babylonica*. I believe that the Hankow willow fills the bill for such a tree. It is closely allied to the crack willow, *Salix fragilis*, of which it has practically all the characters, but, so far as I have been able to learn, it seems to suffer much less from beetles, borers and leaf parasites. Aside from any other consideration, this is sufficient reason why the Hankow willow should be considered as a potential substitute for *Salix fragilis* whenever possible. It is much to be desired that *Salix Matsudana* be thoroughly tested, as it is a pleasing tree, with a somewhat spreading crown, perfectly hardy in eastern Massachusetts. The leaf is up to three inches long by two inches wide, usually smaller. The large specimen cultivated at the Arnold Arboretum has stood for about thirty years without showing signs of decay or losing its shape. Comparatively little damage was inflicted upon this tree by a recent hurricane, which uprooted some of the largest willows in the vicinity of Boston.

Celtis jessoensis, the Yezo hackberry, is a rather slow-growing, medium-sized tree. Specimens 50 years old measure about twenty inches caliper and do not exceed a height of thirty-five to forty feet. The leaf is hairless and smooth, almost leathery, about three to four inches long and two inches wide. The trunk is gray, less rough than in other species of *Celtis*; the crown spreads less broadly and is less irregular than that of our native hackberries.

American and European species of *Celtis* are scarcely satisfactory under cultivation, being usually infested by galls and witch-broom. The

only North American hackberry that has real horticultural value, *Celtis occidentalis* var. *canina*, cannot always be recommended for city planting because it is attacked and often heavily infested by red spider. *Celtis jessoensis* is the one hackberry which, to my knowledge, keeps free from witches'-brooms and galls. On account of the thickness and smoothness of its leaf, it should also prove more resistant against red spider than the majority of the hackberries. I am well satisfied that this tree should be preferred to other species of *Celtis* whenever conditions do not assure that *Celtis occidentalis* var. *canina* can be used with success. It is likely that the Yezo hackberry will prove useful to landscape architects whose work mostly consists of planning for city areas.

Yezo is the name of an island in northern Japan, from which this species was introduced to America about fifty years ago.

Ilex yunnanensis, the Yunnan Christmasberry, is a fine shrub that may yet rank high among the nearly countless importations of Chinese origin that have come to western countries in the last century and a half. Briefly said, it is an *Ilex crenata* that has red berries. That ought to sound interesting to the nurseryman who keeps an eye open to the possibilities offered by the Christmas trade, *Ilex crenata* being unsuited for floral designs on account of its unattractive black fruit.

The Yunnan Christmasberry is a pleasing, clean-looking shrub, that under favorable conditions may grow to reach a height of about ten to twelve feet. The leaf cannot be said to differ in any appreciable way from that of *Ilex crenata*. The berry is in every respect as good as the fruit of the black alder, *Ilex verticillata*.

Ilex yunnanensis seems to be perfectly hardy at the Arnold Arboretum, where it flowers and fruits, although not abundantly. Yunnan, in southwestern China, where this *Ilex* comes from, is a comparatively warm region. It is thus a foregone conclusion that the Yunnan Christmas-

berry will do much better south of Washington than it does in Massachusetts. Aside from its potentialities in connection with the Christmas trade, *Ilex yunnanensis* has real ornamental value for general planting, being in no way inferior to the best specimens of *Ilex crenata* that I have seen in our part of the country.

Viburnum betulifolium, red-fruited arrowwood, is a Chinese species that under favorable conditions can grow up to a height of ten or twelve feet, and it is perfectly hardy and satisfactory at the Arnold Arboretum. Briefly described, it is fairly like any one of the five species which the trade sells under the comprehensive name of *Viburnum molle*, but the fruit, instead of being bluish or black, mostly small and generally unattractive, is red, fairly large and borne on graceful drooping clusters. The flowers are as good as those of any one of the *Viburnums* of the group "molle". (These five species, not mentioning their varieties, are *dentatum*, *scabellum*, *affine*, *pubescens* and *molle*. The first of these *Viburnums* is less often mistakenly named than the others, although it is seldom traded in bulk free of mixture with other species. *Viburnum molle* is almost never found in cultivation. An article will be devoted to these *Viburnums* in the near future.)

There is every indication that the red-fruited arrowwood will prove to be satisfactory under city conditions. The leaf is firm, hairless, usually dark green and clean-looking.

Viburnum erosum, beech *Viburnum*, is a rather low shrub, with leaf and habit that are reminiscent of *Viburnum Carlesii* and *Viburnum bitchiuense*, but bearing roundish glossy red fruits that are in no way inferior to those of *Viburnum Wrightii*. The leaves are somewhat hairy, not dark of color, sharply and broadly toothed, about three inches long by two inches wide and shortly petioled.

As a shrub for the private estate and the small suburban garden *Viburnum erosum*, either single or planted in a group, is certain to meet the

approval of the lover of attractive plant material who has an equally keen eye for distinctiveness and beauty of leaf, flower and fruit. The plants at the Arnold Arboretum often display in September fairly good blossoms that stand in sharp contrast with the already ripe red fruits.

It may be doubted that the beech viburnum stands city conditions. Used under such conditions, viburnums with hairy thin leaves are an easy prey to red spider.

Viburnum dilatatum var. *xanthocarpum* is commonly known as yellow-fruited linden viburnum. Freak varieties based upon variegations and changes in the color of the fruit seldom have real horticultural merit. Tastes do vary, naturally, but, just to mention one instance, I much prefer to see a red fruit instead of a yellow one on *Cornus florida*. The yellow fruit on this variety, however, has real horticultural merit because it seems to agree much better with the habit and the leaf of *Viburnum dilatatum* than the usual dull red berry of the species. Not only is the yellow fruit agreeable as such, but the landscape architect who has a flair for plant material is at last offered the opportunity of securing sharp contrasts in fall colors, playing viburnums with neat, red and yellow fruits.

In my experience *Viburnum dilatatum* is unfortunately not suited to city conditions, although it is frequently planted in parks and landscaped public ground.

Lonicera Korolkowii, blueleaf honeysuckle, deserves a welcome, since the usual run of Tatarian honeysuckles (*Lonicera tatarica*, *Lonicera Morrowii* and their countless hybrids and varieties) have been so persistently used in all kinds of planting that one feels at times that they have lost much of their natural attractiveness. Probably for this reason *Lonicera Maackii* has been greeted as a much-needed novelty. I believe that the blueleaf honeysuckle deserves as warm a welcome as, and perhaps a warmer one than, Maack's honeysuckle.

The contrast between the blue green leaf and the pink-colored blossom of *Lonicera Korolkowii* is striking, as one would expect, but it is not nearly garish enough to be unpleasant. A mature specimen in bloom carries at least as many flowers as it does leaves, a gorgeous sight to see. The fruit has no merit beyond that of *Lonicera*

tatarica. *Lonicera Korolkowii* planted in masses yields color effects not less outstanding than those of azalea and forsythia.

All the *loniceras* of this group are native to regions of Asia that are extremely hot in summer and cold in winter. They thrive often in poor soil which is rich in gypsum. That is about as bad as anything that is found in any city in our part of the country. It is no great wonder that these honeysuckles can be used with good effect in public planting.

Lonicera alpigena, alpine honeysuckle, in its native range, the mountains of Europe, thrives up to an altitude of about 6,000 feet and likes open woods, particularly those of beech. It is evident that the specimens cultivated at the Arnold Arboretum do not find exactly the kind of climate that suits them best. Our summers are too hot, to mention but one of the conditions which unfavorably affect alpine plants in our vicinity.

Despite the unsuitable climate, the alpine honeysuckle thrives fairly well in the vicinity of Boston. The flower is about one-half inch long, red and quite ornamental; the leaf is rather large, measuring up to four inches long by two inches wide. The fruit commends this *lonicera* to the attention of the lover of fine and unusual shrubs, for instead of being the small berry usually borne by shrubs of this kind, the fruit has the size, color, long petiole and drooping habit of a small sour cherry.

OREGON PRESIDENT.

C. Bert Miller, newly elected president of the Oregon Association of Nurserymen, is the son of the late Aaron Miller, who emigrated to California in 1850 during the gold rush days. In 1871 he went north to Milton, Ore., and in 1878 established the Milton Nursery Co., one of the oldest nursery firms on the Pacific coast and for over thirty years a member of the American Association of Nurserymen.

C. B. Miller was born in 1886 at Milton and received his education in the elementary schools of that town, at Walla Walla College, Walla Walla, Wash., and the Portland Business College, Portland, Ore. He secured an interest in the Milton Nursery Co. in 1908 and has been active in the firm since that date, now holding the position of vice-president and treas-

urer. G. W. Miller is president and C. D. Hobbs is secretary.

He has been active in the affairs of the Pacific Coast Association of Nurserymen and during the past year was a member of the advisory board of the Oregon Association of Nurserymen. During the past years he has served on various committees of the American Association of Nurserymen and is a member of the arrangements committee for the 1939 convention at Portland, Ore.

Participating actively in all community affairs, Mr. Miller has served in various official capacities in the Milton Chamber of Commerce, as president of the Blue Mountain Prune Growers' Coöperative and the Milton Apple Show Association and for a number of years as commissioner on the Oregon state board of horticulture. He is now president of the Milton Rotary Club.

NEW JERSEY TREE MEN MEET.

The thirteenth annual meeting of the New Jersey Federation of Shade Tree Commissions will be held November 7, at the Log Cabin, New Jersey college of agriculture, New Brunswick.

The topics that will be discussed during the day include the sycamore blight, hormones, tree diagnosis, safety practices, Dutch elm disease, Japanese beetle and damage done by the recent storm.

The banquet, which will be the closing feature of the meeting, will be in the form of a testimonial to Richard P. White, now executive secretary of the American Association of Nurserymen.



C. Bert Miller.

New and Uncommon Perennials

Sixth and Last in a Series of Articles on New Plants Particularly Profitable Because of Showy Character, Easy Culture and Long Blooming Habit — By C. W. Wood

Before bringing this series on uncommon perennials to a close, may I say a few words about selling this kind of plant material? American horticulture, if it is to advance to its highest plane, needs a wide variety of plants, not just the ordinary ones which are known to and grown by everybody. Not every nursery can or will grow them. While talking to a prominent nurseryman recently about promising new plants, I mentioned one which I thought had a brilliant future, but it did not interest him at all because its growth habits would not permit heeling it in indefinitely and selling it from the heeling yard. Another plant of promise did not appeal to him because that particular genus behaves poorly in one or two sections of the country. Speaking from his own point of view, he was absolutely right, of course, for he is in business primarily for profit. Most other national advertisers are in the same position, their business methods being such that plants of limited demand, uncertain reaction to climatic conditions, or indifferent behavior between the time of digging and packing do not fit into their schedules. What, may I ask, is the future of American horticulture if standardization of material is kept at such a restricted point?

The hope, so it seems to me, lies in the neighborhood nurseryman, for whom this department of the American Nurseryman has been pleading for several years, provided he can be brought out of the rut into which the large-scale operator has dragged him and provided further that the nursery associations will try to help rather than hinder him. Perhaps I should say some members of the nursery associations, because no group as a whole is putting stumbling blocks in his way, so far as I know. However, there are individuals in some associations who seem to lie awake nights trying to think up ways to put small growers out of business, so "we can have things our own way," as one proponent of a minimum license fee of \$25 put it to me when the subject was being agitated

a few years ago. All such restrictive measures are a detriment, it seems to me, and will eventually, if persisted in, react unfavorably toward the entire industry. I am quite fully convinced that some sort of examination which would establish one's qualifications, including technical and practical knowledge, before a license to operate a nursery is given, would be a good thing in the end, but laws intended to control through economic channels can scarcely be of lasting or general benefit.

It would seem the part of wisdom, then, to encourage the neighborhood nursery. Upon it depends the dissemination of plant material that is needed to build up American horticulture. Looking at the matter from the broad viewpoint, anything that is able to raise our gardening practices to a higher level is sure to benefit the entire industry. With these thoughts out of the way, let us proceed to the matter in hand—new and uncommon perennials.

A plant rather new to American trade, which was introduced as *Chrysanthemum erubescens* and is now known as *Chrysoboltonia pulcherrima*, holds much promise for the future. Even in the form now available, which is pink-flushed white, single chrysanthemums on 30-inch stems during September, the plant has more than ordinary value as a garden plant and as a cut flower, and its season of production adds immensely to its usefulness. Its greatest worth, though, so it seems to me, lies in what it holds for the future, for even now it varies much when grown from seeds (several new and outstanding varieties have been exhibited in Europe) and the next decade will undoubtedly add another item to our all-too-short list of autumn-blooming plants.

Fuchsia magellanica is going to be an interesting and perhaps profitable plant for growers south of the Ohio river, but it is not likely to be of much benefit to us of the north. I have grown many of the short-tubed fuchsias in my day and have not found any, with the exception of the plant which we formerly

called *F. discolor* (now known as a form of our present plant) which could stand a winter in the Great Lakes area without a great deal of coddling, and *discolor* was not hardy in northern Ohio unless given a warm jacket. But that does not detract from the value of any form of *F. magellanica* in the more favored parts of the country. The form now coming into prominence in this country, which is the true plant, I suppose, for it has been distributed by the New York Botanical Garden, is said to be a splendid little bush of somewhat trailing habit with ruby-red, short-tubed flowers throughout the summer. Propagation and other cultural practices are the same as for the florists' fuchsia.

Most gentians are too difficult for the average gardener and practically all the good kinds are too finicky for the general nursery. The first of these truths restricts the field for gentian sales to the rather small, but growing army of gardeners who are getting tired of the sameness of plant material and consequent monotony which blights our gardens. The second leaves the field wide open to the neighborhood nursery and a few specialists. As an introduction to this interesting phase of nursery work, I know of nothing better than the gentians, a genus made up of some of the most thrillingly beautiful of blue flowers interspersed among a lot of commonplace things. The present series was not intended to cover any one subject in a thorough way; so it will be impossible to do justice to all the uncommon good members of this group, but a few of the really good ones of fairly easy culture will be mentioned, which, it is hoped, will be an inspiration to some readers to enter this field. This is one place where one will never be sure what the verdict is to be until a thorough trial is made, for no one can tell you what a gentian will do under any particular care until it has been tried in that spot. So enter the affair in a spirit of adventure, hoping that the gods will be kind to you.

I am going, on second thought, to

leave descriptions and cultural directions of all kinds except one which I had intended to mention, until a later time, when a full discussion of the genus will be given. But one kind, *G. Macaulayi*, Wells variety, perhaps the most breath-taking new gentian, should be mentioned now to complete our present inquiry. The plant, said to be a hybrid of *G. Farreri* and *G. sino-ornata*, has inherited some of the good qualities of both parents, making it a really spectacular plant during its blooming period during August and September, when it displays its big, open, blue trumpets. In habit of growth it is about midway between its two parents, lacking the straggling habit of *sino-ornata* and being more vigorous than the other. And it seems to favor *sino-ornata* in its willingness to do what is asked of it. Like most gentians, it is best in a cool spot, which calls for some shade in the middle west, and for moisture at its roots. Give it a gritty soil with leaf mold and attention as to moisture during dry weather, and it should behave well. A limestone soil is usually recommended for it, but I am not fully convinced as I once was that lime or its absence is of as much importance as the other factors mentioned.

If your customers like the two popular geums, *G. Mrs. Bradshaw* and *G. Lady Stratheden*, you should do well with the two new evergreen varieties, *Golden West* and *West Hills*, both Borsch introductions. The former is a deeper shade of yellow than is found in *Lady Stratheden* and the foliage is far superior, while *West Hills* is a beautiful shade of orange. There are also other good things in geums that would probably boost your sales if they were given the opportunity. *Fire Opal*, with semidouble flowers up to three inches across and of a brilliant orange scarlet, is one, and *Dolly North*, a lovely shade of apricot, is another. All the kinds mentioned are among the elect in the long-blooming class, flowering from May or June until late summer if the soil is rich and they do not suffer for moisture. Propagation is by division.

It is perhaps unnecessary to go into details regarding the *Christmas rose* and the *Lenten rose*, but they should surely be mentioned in a list of this kind. Even though they have been in gardens for centuries they

continue to command good prices in this country (from \$1 to \$2.50, according to size of clump) and should make money for the neighborhood grower. If enough are interested, I shall be glad to discuss them more fully later and give my experience in growing them from leaf cuttings.

In the little space left at our disposal, I should like briefly to discuss the possibilities of *Michauxia campanuloides* as a plant for American gardens. The plant has long been known, but has had practically no attention in this country, its occurrence in European lists is quite sporadic, though right now it is being featured by several dealers on that continent. The last is what prompted these notes. Although it comes from southwest Asia, which has sent us a number of plants that are too tender for the winters in latitude 45 degrees north, it has been perfectly hardy with me. In good soil it grows from three to four feet in height, though some of the literature says five feet, and produces its large, white flowers, perhaps best compared to the climbing lily, *Gloriosa superba*, as to shape, over a long period in summer. It is a biennial, according to the literature, though, like many others of that class, it does not always bloom the second year. It is a plant for generous treatment if spectacular results are to be had, and under good care it is a remarkable plant. It is easily grown from fresh seeds.

NEW RED RASPBERRIES.

Three new red raspberries, *Indian Summer*, *Marcy* and *Taylor*, have been introduced by the New York agricultural experiment station, Geneva, N. Y.

These new seedlings have been developed from crosses between *Lloyd George*, a red raspberry from England, and other varieties. *Indian Summer* is a cross between *Lloyd George* and a station seedling known as No. 1950, and it has developed into the best autumn-fruiting berry at the station. *Marcy* and *Taylor* resulted from crosses between *Lloyd George* and *Newman*. *Marcy* is the largest berry to fruit among the red raspberries at the station, while *Taylor* has been so outstanding that it is believed to be well worthy of more extended trials for market and home garden.

NOTES FROM A NURSERYMAN'S WIFE

Old reports of the Kansas State Horticultural Society make good, if somewhat dry, reading. How are these from the 1870's, for instance: "The tree peddler always follows the emigrant to his new home, and with his nice pictures easily entices him to give an order for trees and shrubs." "He must ward off the tree peddler with a 20-foot pole. He must deal with the tree grower." "Our portion of the state is constantly besieged by hungry tree agents who are a curse to the community, for the simple reason that in hundreds of instances old refuse nursery stock is being shoved upon us."

Maligned as he was, the "tree peddler" played a big part in changing the west from a buffalo grazing ground to an agricultural country.

Somewhere we read that a central European gave as his outstanding impression of the United States the amount of deadwood in our timber stands. Where he came from peasants scoured the forests for firewood until no deadwood was visible at all.

The improved hybrid delphiniums, the seeds of which have been put on the market this year, sound almost too good to be true. The work of a Californian, Frank Reinelt, they bear beautifully proportioned flower spikes on strong stems that resist wind breakage. The flowers themselves range in color from white through blue and violet to deepest purple in shades which are rich and pure, and most important of all, the plants come from sixty-five to eighty per cent true from seeds and are reported as coming more true with each generation.

"I'll have to get a job when I get big, but I haven't thought about that yet," said the nurseryman's youngest to his mother the other day. "I don't know what would be the best thing. But anyway, I'm not going to be a nurseryman."

"Why Tommy, why not?"

"Because they don't make enough money. Daddy said so."

Lists of Best French Lilacs

Four Prominent Nurserymen Reply to Inquiry for Standard Selection of Best Dozen Varieties from Their Own Experiences of Boiling Down Long Lists of Lilacs

Few readers found the courage to respond to the inquiry, published in the September 15 issue, of a prominent nurseryman asking if it would be possible to form a standard list of a dozen or fifteen French lilacs, so that propagators could more easily fill distributors' needs. The need of simplification is well recognized, for some of those nurserymen who responded had boiled down lists of several hundred to a selection of two or three score. But even to them it seemed, as one reply phrased it, "an invitation to stick one's neck out" to be asked to name the twelve best commercial varieties.

Because of the difficulty that faces many nurserymen, these few letters will be exceedingly helpful. They must be construed as the opinions of the individuals named, to be taken as such, and not arbitrary selections for contention and argument.

Two of the nurserymen who replied fell back for justification on the comment of Professor Sargent, "The best dozen lilacs are the ones which are in the best bloom this year," or words to that effect.

For their helpful comments on a generally vexatious problem, those whose replies follow deserve due thanks.

From Long Island.

P. M. Koster, of the Bagatelle Nursery, Huntington Station, Long Island, N. Y., writes:

"When I was in Bridgeton I grew many lilacs and made a real study of them, as well as at the Arnold Arboretum, in Highland park, Rochester, N. Y., and in many European nurseries. I have about 400 lilacs card-indexed with a description.

"Amateurs find a great deal of difficulty in making a choice from a catalogue in which doubles and singles and colors are hopelessly mixed. This is why I have grouped them under different colors, singles and doubles separately.

"Almost in every list of lilacs one meets the variety Congo; true, it is a dark variety, but such a poor grower that it should not be recommended."

From his printed descriptive list of

forty varieties of lilacs, Mr. Koster selects the following dozen:

Single: Jan van Tol, white; Réaumur, pink; President Lincoln, blue; Charles X, Hugo Koster, lilac; Souvenir de Ludwig Spaeth, violet.

Double: Miss Ellen Willmott, white; Mrs. Edward Harding, pink; Katharine Havemeyer, blue; Michel Buchner, President Faillières, lilac; Waldeck-Rousseau, violet.

From Illinois.

Miles W. Bryant, of Bryant's Nurseries, Princeton, Ill., realizing the difficulties of such selection, writes as follows:

"We have on our grounds close to seventy varieties of French hybrid lilacs, of which we are propagating about fifty. In addition we have seven or eight varieties of *Syringa hyacinthiflora* hybrids. I suppose that we have a fair acquaintance with forty or fifty additional varieties; yet there are other varieties which may be more deserving of attention than some of the ones that we know most about.

"There are a great number of things to be taken into consideration in making a selection of lilac varieties. Most persons are inclined to choose on the basis of flowers alone, but it seems to me that the character of growth of the plant should really be given first consideration. There are so many of the newer types of French lilacs which have outstanding flowers, but have such poor characteristics of growth, that I hardly think they should be included in any first twelve or fifteen varieties in a list of the type suggested. That is particularly true of the darker colored varieties—there are few of that type which really have a good habit of growth.

"I think that frequently one's ideas of lilac varieties are considerably colored by whether or not plants of the variety which he knows best have been blooming especially well. Wasn't that Professor Sargent's opinion?

"Again, it may be possible for a landscape nurseryman who sells his own products to work out a satisfactory small collection of lilacs, but I

am afraid that we who are in the wholesale growing end would have a hard time cutting down to the twelve best varieties. So I really hesitate to select the best dozen varieties of French lilacs. In attempting to do so, it must be with the understanding that I am basing this selection as much on growth habit as on bloom characteristics and that I have all of my fingers crossed and reserve the right to change my mind at any moment. My list follows:

"Single: Mont Blanc, white; Souvenir de Ludwig Spaeth, red; Hugo Koster, and Charles X, lilac.

"Double: Miss Ellen Willmott, white (perhaps Mme. Lemoine would give a little better flowers, but Miss Ellen Willmott is a freer bloomer); Edouard André, pink; Charles Joly, red; President Grevy, blue (personally I prefer President Carnot, but I am not so sure that I will not be shifting over to Katharine Havemeyer one of these days); Michel Buchner, lilac; Alphonse Lavallée, Maréchal Lannes, violet (I am particularly fond of the flowers on Maréchal Lannes; its growth habit is good, but not so good as Alphonse Lavallée.)."

From California.

W. B. Clarke, of W. B. Clarke & Co., San Jose, Cal., would extend the minimum list to twenty varieties. He writes:

"In a recent issue you asked for suggestions toward a list of the best twelve or fifteen lilacs. We think that the number is too small, because it is necessary to take into consideration both doubles and singles with a variety of color, types, etc., in each group.

"During the last twenty years we have thoroughly tested close to 200 varieties. Under our conditions we would select the following as the ten best singles and the ten best doubles:

"Single: Buffon, Captain Baltet, Diderot, Hugo Koster, Jan van Tol, Louvois, Lucie Baltet, Maurice Barres, Mme. F. Morel, Volcan.

"Double: Charles Sargent, Claude Bernard, Ellen Willmott, Georges Bellair, Hippolyte Maringer, Jeanne

d'Arc, Léon Gambetta, Maréchal Lannes, Maximowicz, President Fallières.

"Please note particularly that the list does not include any of the recent European varieties developed by Le-moine and others. We have practically all of them, but have not grown them long enough to come to definite conclusions, although it is altogether likely that several of them will far surpass anything in the list cited. This opinion is partly based on what the writer saw of these newer varieties in England and France last spring."

From Pennsylvania.

H. G. Seyler, of the Farr Nursery Co., Weiser Park, Pa., submits a longer list as his final "boil down." He writes:

"We are as enthusiastic about simplification as anyone, but we have long since got over being arbitrary. We still claim to be hard-boiled and haven't fallen in love or gone emotional about any plant variety. We have yet to keep any variety on the list just because we like it. Sales experience is a welcome and definite arbiter.

"With these comments, we, therefore, submit the following list of lilacs, after having boiled our list down from 300 to sixty. I am not presenting it as authoritative, merely as our own opinion.

"The list, as presented, includes brief comment as to how a variety is distinct from others of its type and color, its justification for survival:

"White, single: Jan van Tol, giant; Mont Blanc, flat truss; Vestale, conical truss.

"Pink, single: Lucie Baltet, copy; Jacques Callot, clear; Macro-stachya, tender.

"Blue, single: Bleuâtre, small intense; C. Colombo, dwarf plants, giant florets; Comte de Montebella, tender, large; President Lincoln, deeper, large; De Mirabel, distinct purple blue.

"Red, single: Congo, popular; Captain Baltet, violet red; Maréchal Foch, Réamur shade and gracefully loose truss; Marceau, largest light florets and trusses; Massena, largest dark florets and trusses; Mme. F. Morel, long stems and freest; Réamur, distinct shade.

"White, double: Edith Cavell, cream; Miss Ellen Willmott, pure.

"Pink, double: Belle de Nancy,

popular; Léon Gambetta, best; Mme. Antoine Buchner, tenderest; President Fallières, distinct; Vauban, earliest.

"Blue, double: Hippolyte Marin-ger, fluffy; Jules Ferry, plump truss; Oliver de Serres, giant florets; President Grevy, still 'tops'; Maréchal Lannes, semidouble, violet blue, giant florets.

"Red, double: Charles Joly, still

'tops'; Georges Bellair, more squatty and different shade; Paul Thirion, squatty and claret rose.

"Tricolor (Have mixed shades when opening and change as they develop, including red, pink and blue in the same truss, each variety different from others): Léon Simon, Michel Buchner, President Poincare, Rede Jarry des Loges, Thunberg, Waldeck-Rousseau."

AMERICAN ASSOCIATION OF NURSEYMEN

RICHARD P. WHITE, EXECUTIVE SECRETARY

636 SOUTHERN BLDG., WASHINGTON, D. C.

PLANT DESCRIPTIONS.

Formation of a committee to pass on plant introductions and to provide accurate descriptions of them for publication, as a means of simplifying horticultural nomenclature, is suggested in a letter directed to Chet G. Marshall, president of the American Association of Nurserymen, by Donald Wyman, horticulturist at the Arnold Arboretum, Jamaica Plain, Mass. Every nurseryman who has sought to make his catalogue conform to descriptive standards with regard to names and descriptions of plants has individually been concerned with the perplexing problems involved, of which there are many instances.

In some states, the experiment stations have provided, at the request of nurserymen's associations, descriptions of fruit varieties so that they might appear uniformly in catalogues. Organizations devoted to a single flower have, through research or registration, tackled the problems of nomenclature and descriptions, primarily to avoid duplication. The suggestion is presented that the A. A. N. sponsor a committee for a similar purpose with respect to woody ornamental plants. Donald Wyman's letter follows:

"In the past when a nurseryman has acquired a new variety or species, often a clear-cut description of this does not reach the trade papers. In fact, it might not even be noted in that nurseryman's catalogue. It is too bad that this is the case. Are there any means whereby a committee can be appointed by you or in conjunction with other organizations so that when a new woody

plant is to be offered on the market a clear-cut description of it and a history of its origin can be published in one of our regular widely distributed horticultural magazines?

"In discussing this matter, Prof. Alfred Rehder brought up the point that many times it is exceedingly difficult to find a good description of a new plant, and it often works hardship on the nurseryman himself. For instance, if he should have a new species or variety and does not publish a description of it, another nurseryman may select a second name for this same plant, and if a suitable description is published with this second name, necessarily the second name would probably always be associated with the complete description. In other words, the name under which a new plant is first described in any publication is, correctly speaking, its proper name.

"In revising his 'Manual of Cultivated Trees and Shrubs,' Mr. Rehder has come across countless instances where he is positive a plant has been introduced by a certain organization, but he can find no clear-cut, concise description of it at the time of its introduction. If you could gain the coöperation of your association for organizing a 'new plant committee' with particular regard to woody ornamental plants, it would undoubtedly save a great deal of confusion and misunderstanding. Such a committee could determine whether or not the plant in question actually is new and, if it is, could offer an accurate description to the originator. If this description were satisfactory to him, it could be published in one of the national horticultural

tural magazines. Then there could be no doubt about its origin, its description and its trueness to name.

"As you know, many horticultural organizations have recently adopted such committees. The American Rose Society is one. The American Pomological Society is working on such a group right now. If the American Association of Nurserymen could have a similar group, it would be able to help American horticulture immensely. Needless to say, we at the Arnold Arboretum would be glad to assist in this work in any way we could."

KEEP AFTER COLLECTIONS.

Last month a large wholesale nursery firm was pleasantly surprised by the receipt of a check for \$37.50 from Charles Sizemore who, besides acting as traffic manager for the American Association of Nurserymen, continues to operate a collection bureau for members. The check was the result of his persistence, as the nursery firm had turned a note for \$524.27 over to him for collection, January 5, 1928. The final check brought the total received by the nursery firm to \$387.90, the balance representing an average commission of twenty-six per cent for collection, suit having been filed for an unpaid part of the claim. Four different attorneys handled the matter, and 187 letters were exchanged between the creditor, the attorneys and the collection office. In collection of accounts, apparently, persistence pays!


SHOWY BLUEBERRIES.

The value of blueberries as ornamentals was discussed by Ben Blackburn, extension specialist in landscape gardening at the New Jersey college of agriculture, in a recent radio garden club broadcast.

Blueberry is the general common name for the whole genus *Vaccinium*, but the creeping red-fruited kinds are the familiar cranberries, which because of their water requirements are not suitable for the average home gardener. However, at the edge of a brook or a pool in a wild garden they can be used to good advantage with little trouble.

The high-bush blueberry, *Vaccinium corymbosum*, is the most valuable both from an economic and ornamental view. The color of the flowers varies

"PAINESVILLE NURSERIES"



This is our 84th consecutive year.

**We grow things
in QUANTITY:
of well proved
QUALITY.**

See Our Catalogues

Our prices are right.

Fruit Trees
Deciduous Trees
Evergreen Trees
Shrubs
Vines
Roses
Small Fruits
Hardy Perennials
Greenhouse and
Bedding Plants
Seeds, Bulbs, Tubers

COMPLETE NURSERY SUPPLY

The Storrs & Harrison Company

PAINESVILLE, OHIO

from white to creamy white and pink, but they need close inspection to reveal their daintiness and lovely molding, being not showy from a distance. The flowers, of course, are followed by the blueberry fruit, which is attractive as well as useful.

The vivid colorations of orange and copper foliage in autumn make the plant one of the most beautiful shrubs of that season of the year. In the winter the branching twig arrangements are attractive.

Because of its variance in height from four and one-half feet to seven or eight feet, the high-bush blueberry is excellent for screening porches or hedging. It is adaptable to almost any situation as long as it has an acid soil, and it transplants easily.

A smaller and lower shrub, but of equal value is the deerberry, *Vaccinium stamineum*. Its ornamental value is about the same as the high-bush blue-

berry, but it is a lower-growing bush with greenish white to purplish flowers. Its pear-shaped fruits are bloomy, greenish or purplish and not pleasant to eat. It is adaptable to home grounds with little difficulty.

Other useful bush blueberries suitable for home grounds are *V. pennsylvanicum*, growing only eight or ten inches high, which bears blue-black berries in July that are often sold along the roadsides; *V. Arctostaphylos*, of similar value to the high-bush blueberry in plantings, making a handsome mass five to nine feet high; *V. ovatum*, box blueberry, from the Pacific coast, evergreen and tender; *V. canadense* and *V. vacillans*, low kinds worthy of use in naturalistic plantings, and *V. Vitis-idea*, a low evergreen shrublet for the alpine garden.

All of these varieties can be grown from seeds, but care must be taken that they obtain an acid soil.



Charlie Chestnut

Tells How to Raise Your Own Living



The whole trouble with the live stock started back about a year ago, but on account of everything is over now, I will give the different nurserymen the inside details, so they can see what brought the idea into Emils head and how it comes we are now out of live stock and gettin to pay some time to the nursery business again. There may be some merit to the idea, but I have decided that times are different since 1890 and the plans we worked on had some drawbacks to say the least. Emil accused me of gettin him into the mess but when I tell the facts anybody can see that it was Emils fault that he carried it too far.

About a year ago I was down to my home town for a visit and as I had time on my hands, I went to visit a old time nurseryman who has a little place on the edge of town. He was going strong about 1890, but about 1910 he begun to peter out and in late years he aint done nothin but take a few orders around here and there for a few fruit trees.

"Charlie," he says to me, "the trouble with nurserymen is they have forgot that after all they is only farmers, and they dont raise there own living like they did in my day. I can remember," he says, "I used to have hogs and horses and geese and chickens and cows just like any farmer. I had my own apples and potatoes. I didnt have to buy nothin hardly, so what I took in at the nursery was mostly all profit. Now-days the nurserymen buys there own potatoes and hamburger and eggs. It aint no wonder they are always hard up. Then he got out some old books where he used to keep accounts. Heres how I used to work it in them days," he says, and he started to read out of the book:

"April 12, 1892 to John Wolf, 12 apple trees traded for one brood sow.

"April 16, 1892 to Silas Clark, 12 soft maple trees traded for 40 geese.

"April 22, 1892 to Mrs. Cassidy, 50 Scotch Pine traded for one yearling colt."

"You can see how it went," he says. "Something coming in all the time. We had a barrel of salt pork

in the fall and always butchered a cow or two, so when me and my two hired men got around the kitchen table 3 times a day we had mostly our own stuff. We worked the men hard 14 hours a day and give them \$20.00 a month and board. They cant no nurseryman make it go the way they do it in these times. I could tell the nurserymen a thing or two," he says.

When I got home I was tellin Emil, but I didnt think he paid any attention and I forgot all about it a few weeks later. One nite Emil was late for supper, and his wife was worried till Emil come home about 9 oclock leading a old red cow. "I traded her from a farmer about 6 miles west of here," he says. "Now we will have to take the Chevy truck and go after my car."

I says, "How did you happen to get took in on that deal?"

"Never mind," he says, "I am all

thru buying milk and butter and hereafter we will make our own."

We didnt have no place to put the cow so we tied her by the office till morning. The old girl hollered all night. I guess she was lonesome or homesick.

In the morning we found the cow had got loose and eaten up Emils choice collection of delphinium and tramped back and forth over the seed beds all nite.

I says to Emil, "It will take a lot of buttermilk to pay for that," but Emil cant take a joke at all some-times, and he practically told me to mind my own business.

"I didnt hire out to be no nurse made to a cow," I told him, "so dont figger on me to run the dairy." I made up my mind to leave Emil know where I stood on the live stock situation.

"Dont worry," he says, "I wouldnt trust you with a high grade cow like that anyway."

We spent the next two days fixin up a corner of the barn for the cow, when as I told Emil we should have been cultivating the barberries. Then Emil was gone for two days to try

TAXUS CUSPIDATA CAPITATA

UPRIGHT YEW



Orders filled with fine, bushy stock like those shown in photograph.

TAXUS TALENTS:

Rich, dark green. Hardy. Transplants easily. For Hedges. For Specimens. For Foundation Plantings. Shears to any form. An excellent Topiary subject.

Priced Right—Send for quotations.

Carload and truckload lots are economical.

BOBBINK & ATKINS RUTHERFORD
NURSERYMEN SINCE 1898 NEW JERSEY

We grow hundreds of other items, too.

APPLE TREES

Maryland's largest growers of Apple Trees and Fruit Plants are in a position to quote attractive prices and save your money. If you are looking for something real nice in Apple Trees send for our Trade List. A complete list to select from in all grades and varieties. Fibrous rooted, well graded and sure to please you.

Fall shipping season opens October 15.

E. W. Townsend Sons Nurseries

Wholesale Dept.
Salisbury, Maryland

PINK DOGWOOD

	10	100
1 1/2 to 2 ft. B. R.	\$ 7.00	\$60.00
2 to 3 ft. B&B.	10.00	90.00
3 to 4 ft. B&B.	16.00	150.00
4 to 5 ft. B&B.	26.00	250.00
5 to 6 ft. B&B.	33.50	300.00
6 to 8 ft. B&B.	50.00	.....
8 to 10 ft. B&B.	80.00	.....
10 to 12 ft. B&B.	100.00	.....
12 to 14 ft. B&B.	190.00	.....

Specially selected extra heavy specimens, exceptionally built trees. Should be called super-specimens. 10 100
3 to 4 ft. B&B. \$22.50 \$200.00
6 to 8 ft. B&B. 70.00
8 to 10 ft. B&B. 90.00
10 to 12 ft. B&B. 140.00
12 to 14 ft. B&B. 250.00

KINGSVILLE NURSERIES

H. J. Hohman, Kingsville, Md.

UNDERSTOCKS FOR GRAFTING

	Per 100	Per 1000
<i>Cornus florida</i> , selected seedlings	\$5.00	\$25.00
<i>Juniperus virginiana</i> , transplants	7.50	60.00
<i>Syringa vulgaris</i> , selected seedlings	3.00	25.00
<i>Thuja occidentalis</i> , transplants	6.00	50.00
<i>Thuja orientalis</i> , transplants	4.00	35.00
<i>Quercus Robur</i> , pot-grown	10.00	75.00

Send for our list of seedlings, pot-grown evergreens, etc.

HESS' NURSERIES

Mountain View, New Jersey

KOSTER COMPANY, Inc.

	100 rate	1000 rate
<i>TAXUS CUSPIDATA SPREADING</i>		
12 to 15 ins. B&B.	\$0.90	\$0.75
15 to 18 ins. B&B.	1.25	1.00
<i>AZALEA INDICA NAMED</i>		
8 to 10 ins. B&B. ....	.90	.75
10 to 12 ins. B&B.	1.25	1.00

BRIDGETON, N. J. Write for catalogue

PRINCETON NURSERIES

of PRINCETON, N. J.

SUPERIOR

Hardy Ornamentals

PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

Milford

Delaware

to make a trade for some cow feed. He had it in his head some farmer would take some of them lombardy poplars off his hands for some corn and hay, but he didnt find any body wantin poplars, so he wound up by havin to buy it in town for cash, as he was owin the lumber yard for the addition we made to the greenhouse last spring and they would not stand him off for the feed till he paid the old bill. Next we had to put in a water tank and a milk pail and some fancy milk cans and put up a fence so the cow could walk around. Altogether he spent over a hundert dollars gettin ready for that cow to start operating. A few days later we had so much milk that Emil had to get a churn, so he spent the winter workin the churn and feedin the cow. "Dont see how we went so long without a cow," Emil said.

It wasnt long after that Emil come home one nite with a old pig and 6 little ones. Right away he caught hell from the old lady. She didnt like the idee of havin the pigs so near the house. She said, "If you want those pigs you will have to make a pig pen way down at the farther end of the nursery. That took the best part of a week gettin the pig house ready and building a fence. We had to haul water and feed twice a day and spent a average of 2 hours a day chasing pigs. They went thru the fence just like it was nothing. He got in a big argument with Mrs. Murphy next door when the pigs got into her garden and that cost Emil \$5.00 cash to make that good. After that we bought a new fence for \$28.00 that held the pigs in a little better.

It got so that when customers called up, Emils wife would have to tell them that Emil was down to the end of the nursery feeding the hogs or else he was in the barn milk-in the cow or he was feedin the geese or some place else doing the chors for the livestock. One lady said, what is this a farm or a nursery, and Emils wife said she would like to find out herself. We lost a lot of customers on account of we was always busy with the animals. One day me and Emil was gone for 2 hours chasing a pig that got out and we lost a chance to get rid of a whole block of honeysuckle. We

FRUIT TREES

GROWN BY VIRGINIA'S LARGEST GROWERS

In an assortment of varieties and sizes. Grown so that you can safely handle, and priced so that you can afford to handle. **APPLE**—offered in the following varieties:

Albemarle Pippin	New Red Jonathan
Ben Davis	New Red Rome
Delicious	New Red Stayman
Early Harvest	N. W. Greening
Fall Pippin	Paragon
Grimes Golden,	Smokehouse
D. W.	Stayman
Jonathan	Summer Rambo
King David	Sweet Paradise
Lady	Turley
Lowry	Winesap
M. B. Twig	Yellow Delicious
Mother	Yellow Transparent
New Red Delicious	York Imperial
New Red Duchess	

PEACH—We offer 500,000 Peach in a large assortment of varieties and in various sizes at considerably reduced prices.

Send us your Want List for quotations and receive a copy of our New Low Fall Price List offering a large assortment of both Fruits and Ornamentals.

WAYNESBORO NURSERIES, INC.

Waynesboro, Virginia

We specialize in APPLE AND PEACH TREES

Strawberry, Asparagus, Raspberry and Blackberry plants.

Grapevines, 1 and 2-year.

OUR MANY YEARS' PRODUCTION EXPERIENCE COMBINED WITH OUR FAVORABLE LOCATION ENABLES US TO OFFER STOCK THAT MUST PLEASE AT PRICES YOU WILL APPRECIATE.

Submit your definite list for quotations.

BOUNTIFUL RIDGE NURSERIES

Princess Anne, Md.

The Westminster Nurseries

WESTMINSTER, MARYLAND

Surplus Bulletin just issued. Lower prices on Evergreens, Deciduous Trees and Shrubbery, Barberry, Thunbergii, green and red; Evergreen Barberry, Glossy Privet, California Privet, Lining-out Stock, 2-yr. Budded Apple. Large supply of Peach Trees—Hale Haven, South Haven, etc.

It would be to your interest to have our Bulletin. We will mail on request.

CANADIAN HEMLOCKS

Sheared, transplanted and bushy

2 to 6 1/2 feet

Truckload lots or less

SPRINGDALE NURSERY

H. C. Beardsley

Montour Falls, N. Y.

EVERGREENS

Complete Assortment

Large and Small Sizes

Write for Special Trade List

THE SIEBENTHALER CO.

Dayton, Ohio

seen the party later and he told us he come to the nursery and looked around and didnt see nobody and he thot Emil was out of business. That hurt Emil especially when he found the customer had bought his honeysuckel from the F and M nursery. But that was the way it went as I says to Emil, "How can we be selling bushes and at the same time be out runnin down pigs and that. We can't do it," I says. "Its come to a pretty pass," I says.

Emil always had trouble with his stomach, but after that winter of livin on pork sausage and salt pork and undercured ham he practically knocked hisself out for good.

The worst of it was when he got the geese. We had to put them in the packing shed. That fall we packed all our orders outdoors, which was no good for the shrubbery, as any nurseryman knows. But we had to do it. The geese was all over everything in the shed. For some reason Emil took a awful liking for them geese. He was in there most of the time and took especial good care. Day by day Emils wife kept gettin madder and madder. The noise from them geese was terrific. It got so bad that Emils wife said she wouldnt stay there and by george she lit out and went to her sisters. All of a sudden something come over the geese and they started to die one by one. Finally they all died and Emils wife come home when Emil wrote her about it. Emil accused me of poisinin the geese, which was a dam lie as I told Emil.

Only one good thing come out of the chicken deal. Emil sent to the state experiment stations and got all the different ways to raise hens and make them come thru with the eggs. The most hens we had at one time was 860, and Emil was getting a crate of eggs a day. When we got thru sorting eggs and puttin em in cartons, Emil would take the eggs in the Chevy truck and sell the eggs from door to door. He would be gone all day friday and saturday and he practically told me he had a notion to give up landscaping and only sell nursery stock cash and carry, to anybody that turned up at the nursery. When Emil was out with the eggs I was feedin the hogs and cow and takin care of the geese and chickens so time slipped on till one day in

late March Emil happened to think we had not got out the catalog. We dropped everything and worked on that. The egg customers kept callin up until Emil got good and mad. All of a sudden he decided to get rid of the hens. We killed hens and took off the feathers and it took us a week. We didnt stop to fill the orders or nothin. Even now the sight of a hen makes me creep. That was really the beginning of Emil taperin off on live stock. But what I started to tell was about the hen house. Emil says he is goin to move it up near the road and remodel it for a office. "It aint just the right shape," Emil says, but he aims to salvage all he can out of the hen deal.

That winter Emil bought 140 bushels of potatoes and 500 lbs. of cabbage on a trade. Emils house smelled to high heaven all winter. The basement was too warm and the potatoes rotted and the cabbage too. I noticed when Emil would come out in the morning even his clothes smelled of cabbage and old turnips, but I was afraid to say anything because Emil was gettin awful touchy on the whole idea.

The cow died in the spring so we had a lot of feed on hand and a good churn. We had a good chance to trade for a couple of goats which I took in on a deal but Emil made me take the goats home. By that time Emil was gettin pretty well over the idea of livestock so he give the last two pigs to his brother in law who is on relief in town. The next we knew that brother in law of Emils had run a raffle on them 2 pigs and took the money and went on a two weeks bender. That was the last of the pigs.

Emils wife says if he ever brings home any more livestock she will leave for good. So Emil has got one

thing out of it, he knows how to get rid of the old lady if she gets too ornary. I threatened to quit too one day, but Emil said it would be good riddance, so I did not bring up that point again.

The other day Emils wife asked him to feed the dog, and you should hear Emil holler. "How in hell do you expect me to pay attention to the office and the nursery and look after the landscape jobs and then monkey around with a dog."

As Emil says, "The trouble with nurserymen is they have got to pay strict attention to business. Thats the way to get ahead with a nursery," Emil says.

FRUIT CROPS.

Prospective apple production for 1938 declined about two per cent during September and is now indicated at 130,000,000 bushels, compared with the 1937 crop of 211,000,000 and the 1927-36 average of 151,000,000 bushels, reports the bureau of agricultural economics, Washington, D. C. The 1938 pear crop is now indicated at 31,500,000 bushels, seven per cent above the 1937 crop and thirty per cent larger than the 1927-36 average. Prospective grape production declined slightly during September, but the 1938 crop of 2,500,000 tons is only ten per cent below the record crop of 1937 and fourteen per cent above average. Total grapefruit production for the 1938-39 marketing season is indicated at 40,700,000 boxes, one-third larger than the previous record crop of 1937-38. Production of winter and spring varieties of oranges for 1938-39 is indicated at about 50,000,000 boxes, compared with 46,000,000 boxes in 1937-38, and 38,000,000 boxes in 1936-37.

Prices of apples and pears are generally higher than a month ago, but

FRUIT TREE SEEDLINGS

WESTERN-GROWN

APPLE — MAHALEB — MAZZARD
QUINCE — MYROBALAN
PEAR, BARTLETT OR
FRENCH SEROTINA, USSURIENSIS

A large acreage of high-quality Fruit Tree Seedlings. Growing plants in Washington and Kansas. Get our prices before buying.

Ask For 92-Page Trade List

Large and Complete Line General Nursery Stock

MOUNT ARBOR NURSERIES
E. S. Welch, Pres. Est. 1875 Shenandoah, Iowa
"One of America's Foremost Nurseries"

LINING-OUT STOCK

Complete list of deciduous lining-out stock this year.

Place your order now for either Fall or Spring shipment, and avoid disappointment when wanted.

THOMAS B. MEEHAN CO.
Dresher, Pa.

OFFERING LARGE SPECIMEN EVERGREENS

Fir — Larch — Pine — Spruce

4 ft. up to 20 ft.

On land we must clear. If interested, write for special low prices.

BROWN BROTHERS CO.
Continental Nurseries
ROCHESTER, N. Y.

TAXUS Cuspidata Capitata

1½ to 10 feet.

Best available.

Carloads or truckloads only.

VISSER'S NURSERIES
Springfield Gardens, L. I., N. Y.



EVERGREENS

For Seventy-four years
growers of Quality Evergreens
Lining-out Stock a Specialty
Write for Trade List

EVERGREEN NURSERY CO.
Established 1864 : STURGEON BAY, WIS.

WHOLESALE GROWERS

of a complete line of Nursery Stock
including Fruit Tree Seedlings.

Lake's Shenandoah Nurseries
Shenandoah, Ia.

HILL'S EVERGREENS

Complete assortment of lining-out sizes
Also larger grades for landscaping
Send for our wholesale catalogue

D. HILL NURSERY CO.
EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS

prices of most other fruits have shown relatively little change. Consumer incomes, which greatly influence the domestic demand for fruits, have made definite gains during the past two months and are expected to increase further in the next few months. Little change from a month ago is apparent in the outlook for foreign demand for our fruits, the effect of small European fruit crops being partially offset by continued weakness in foreign industrial activity.

SUCKERS ON FILBERTS.

Because of the annoying habit of the filbert tree to produce suckers that must be continually removed, G. L. Slate, secretary of the Northern Nut Growers' Association, tells of various attempts to use nonsuckering Turkish tree hazel as an understock for the cultivated varieties of *Corylus Avellana*.

The Turkish tree, *Corylus Columna*, grows naturally without any tendency to sucker. It is rapid in growth, and mature specimens in New York range in height from forty to fifty feet. However, in the Pacific northwest it is lacking in uniformity and shows winter injury of various forms.

A. M. Gray, Milwaukie, Ore., who has made many grafts using *Columna* stocks and carefully noted the results, is not ready to recommend it as a good practice for such varieties as *Barcelona*, *Brixnut*, etc., which do not sucker too freely. Nor is he ready to condemn it for the free suckering varieties of the *Aveline* group.

Mr. Gray has three 10-year-old plantings of *Brixnut* on *Columna* roots which he has observed carefully and found the trees are much more variable than in orchards propagated by layering. The rate of growth is slower, and the trees are less fruitful. Many of the grafts have died back to the union, showing a lack of congeniality between the stocks and the cions.

Mr. Gray still favors using layered trees and overcoming suckering by growing the trees in the nursery so that the roots will be long enough for the tree to be planted with about eight inches of root sticking straight down into the ground and leaving several inches above the ground. Trees grown by this method may sucker to some extent, but the suckers can be easily removed and in time will practically disappear.

EVERGREENS

Lining-out stock

Pfitzer's Juniper

Rooted cuttings

1-year-old

2-year-old

Grafted plants

1-year-old

2-year-old

Biota orientalis compacta

Seedlings and transplanted

ALSO READY STOCK FOR
LANDSCAPING in all sizes.

Ask for complete wholesale price list.

**THE PAUL OFFENBERG
NURSERY CO.**

1988 E. Livingston Ave.
Columbus, O.

SHADE TREES

IN A LARGE ASSORTMENT
OF VARIETIES AND SIZES

Among the varieties we offer:

Ash, American White	Maple, Norway
Catalpa Bungei	Maple, Schwed-
Elm, American	ler's
Elm, Chinese	Maple, Silver
Hawthorn	Oak, Pin
Jap. Flowering Cherry	Poplar
	Willow, Weeping

Write for our New Low Fall Price List,
offering Fruits as well as Ornamentals.

WAYNESBORO NURSERIES, INC.
Waynesboro, Virginia

BAY STATE NURSERIES

INCORPORATED

NORTH ABINGTON, MASS.

— OFFER —

A GENERAL LINE OF NURSERY STOCK AT
COMPETITIVE WHOLESALE PRICES.

SPECIALIZING IN

TAXUS, AZALEAS, RHODODENDRONS

AND ODD ITEMS YOU ARE UNABLE

TO OBTAIN ELSEWHERE.

Ask for Our Price List

STOCK YOU WILL NEED!

Ask for prices.

Nursery-grown. Transplanted.

Aronia Arbutifolia.
Cornus Paniculata. *Sibirica.*
Cotoneaster Acanthifolia and *Divaricata.*
Ribes Alpinum and *Odonatum.*
Rhus Canadensis. *Glabra.* *Typhina.*
Rosa Setigera. *Blanda.* *Rubrifolia.*
Bolleana Poplar.
Malus (Flowering Crab).

ESCHRICH'S NURSERY

Sta. F, Route 9, Milwaukee, Wis.

SHRUBS

QUALITY STOCK

For your better Landscape Jobs.

Write for Special Trade List

THE SIEBENTHALER CO.
Dayton, Ohio

Forestry Committee Meets

Two Congressmen Confer with State Foresters, after Meeting at Which Latter Endorse Farm Forestry Act

The joint congressional committee on forestry held its first public hearing at Sun Valley, Ida., September 2, at the request of the National Association of State Foresters, which held its nineteenth annual meeting at Boise, August 28.

Senator James P. Pope, of Idaho, and Representative Wall Doxey, of Mississippi, one of the authors of the Norris-Doxey act, represented the 10-man committee at the hearing. Spokesmen for the foresters, as appointed by the president of the association, were: W. G. Howard, New York; R. L. Emerick, Pennsylvania; F. D. Heyward, Jr., Georgia; Marcus Schaaf, Michigan, and T. S. Good-year, Washington.

Statements of forestry problems in timbered portions of the United States were placed before the committee by various state foresters, representatives of the lumber industry and other interested parties.

The joint congressional committee on forestry, composed of five members from the Senate and five from the House, was created during the closing days of the last session of Congress to investigate the forestry situation in the United States, with an appropriation of \$10,000 to cover the costs of the committee's studies. The committee is composed of the following: Senators—Charles L. McNary, Oregon; William Gibbs McAdoo, California; James P. Pope, Idaho; James H. Bankhead, Alabama; Ellison D. Smith, South Carolina. Congressmen—H. P. Fulmer, South Carolina; Wall Doxey, Mississippi; H. Engelbrite, California; Walter M. Pierce, Oregon, and Daniel Reed, New York.

This hearing was the first to be held by the committee, and no definite program of hearings for the future has been determined, as the membership of the committee will, no doubt, be changed by the coming elections.

At State Foresters' Meeting.

Among the speakers at the meeting of the National Association of State Foresters were Chief Forester F. A. Silcox, who emphasized the desirability of close coöperative relationship between state and federal and private

industry, and E. W. Tinker, assistant chief forester, who announced a plan which he had formulated whereby voluntary agreements would be entered into with private forest owners and an intensive forest management initiated on their lands, with the governmental cost to be liquidated in whole or part by the sale of the products derived from the land.

Among the resolutions passed at the meeting were the following:

"The appropriation of \$2,500,000 authorized by the Norris-Doxey act be endorsed and supported by the association in view of the information furnished by Chief Forester Silcox and Assistant Forester Tinker that seventy per cent of the amount involved has been earmarked for allotment to state forestry agencies.

"If and when forest legislation measures are deemed necessary, they should be prepared within and by the states, and that such measures should be written in state law only as they have been proven practicable by actual trial.

"The United States forest service is urged to make known at an early date its proposed recommendations to be

made to the joint congressional committee on forestry, to the end that the states and other interests may have opportunity to study the federal program."

Officers elected by the association for the ensuing year are: President, Rutledge Parker, Montana; vice-president, James O. Hazard, Tennessee, and secretary and treasurer, O. A. Alderman, Ohio.

SHIFT FOREST CONTROL.

Moves to forestall the shifting of forest service functions to the Department of Interior are seen in the recent streamlining of the Department of Agriculture. As an initial step, work under the Norris-Doxey farm forestry act, now affecting some 40,000,000 acres of timberland, has been transferred to the soil conservation service. Officials deny that the change was made to hold this function within agriculture. Secretary Ickes, however, has long had a covetous eye on the forest service. Having taken over the bureau of mines and acquired grazing land control, the Interior Department has ambitions for general jurisdiction over natural resources under the government reorganization plan.

A Cost Sale to Clear a Block NORTHERN PECANS

Some beautiful high-headed 9 to 11-ft. Pecans. They are Greenriver variety, the best bearer of all the Northern Pecans. Trees left over from planting my 50-acre orchard in Philadelphia climate. Variety native in Ohio valley. Perfectly hardy at Buffalo and in Connecticut. To clear block am selling at cost of digging, handling and material, plus 10 per cent—\$4.15 per tree, balled and burlapped, F.O.B. cars Round Hill, Va.

Terms 25 per cent with order, balance eight draft 60. attached

Good Only for Shipments This Fall.
Nothing Doing in the Spring

Also a few large Burlington Hybrids (Pecan and Shagbark) and McCallister Hybrids (Pecan and big Shellbarks).

SUNNY RIDGE NURSERY
BOX AN SWARTHMORE, PA.

Jackson & Perkins Company

Wholesale Nurseries

NEWARK
NEW YORK STATE

• **TAXUS** •
AZALEAS
RHODODENDRONS

ASK US ABOUT THEM

WYMAN'S
FRAMINGHAM NURSERIES
FRAMINGHAM MASSACHUSETTS

PEACH TREES

If you are interested in something real nice at attractive prices, Maryland's largest growers of Fruit Trees and Fruit Plants are in a position to offer you at attractive prices an exceptionally fine grade of Peach Trees in both June Buds and Yearlings. All this stock is well headed and fibrous rooted. Send for our Trade List, or better still, let us have a list of your requirements for special booking prices.

Fall shipping season opens October 15.

E. W. Townsend Sons Nurseries
Wholesale Dept.
Salisbury, Maryland

Broad-Leaved Evergreens AZALEAS, HOLLIES

Pyracantha Coccinea Lalandi
Cornus Florida, Magnolia Kobus
Helleborus Niger

LINING-OUT STOCK
Write for Wholesale Price List

LE-MAC NURSERIES
Hampton, Virginia

CHOICE SHRUBS

Golden Elder, 3 to 4 ft.; 4 to 5 ft.
Honeysuckle Morrowi, 2 to 3 ft.; 3 to 4 ft.
French Pussy Willow, 3 to 4 ft.; 4 to 5 ft.
Snowball, 2 to 3 ft.; 3 to 4 ft.
Spiraea Thunbergii, 2 to 3 ft.; 3 to 4 ft.
Red Leaf Barberry, 18 to 24 ins.

We also grow a complete line of hardy nursery stock. Write for quotations.

SHERMAN NURSERY CO.
Charles City, Iowa

CHIEF and LATHAM RASPBERRIES RED LAKE CURRANT

Hardy Fruit Tree Seedlings
Americana Plum *Manchurian Crab*
ANDREWS NURSERY CO. Faribault Minn.

SMALL FRUIT PLANTS

Evergreens — Shrubs
Lining-out Stock

Send for Complete Trade List

SCARFF'S NURSERIES
New Carlisle, O.

Wholesale Growers of
Grapevines, Currants,
Gooseberries, Blackberries
and Raspberries

Let us quote on your requirements
FOSTER NURSERY COMPANY, INC.
69 Orchard St. Fredonia, N. Y.

Our Specialties Are
GRAPEVINES, CURRANTS,
STRAWBERRIES
General line of Small Fruit plants
Trade list sent on request
L. J. RAMBO'S WHOLESALE NURSERIES
R. 1 Bridgman, Mich.

 **Twenty Million**
Strawberry Plants
Complete list of all the new varieties.
We furnish packing out service for nurserymen and seedmen.
Write for wholesale price list.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

PLANT ILLINOIS ROADS.

Autumn roadside development projects along 465 miles of Illinois highways, announced by F. Lynden Smith, director of the department of public works and buildings, to be carried on with \$274,125.98 in state and federal funds, will bring the total roadside planting work for the year to 685 miles. The spring program, now completed, included 165 miles of planting from \$212,000 of federal funds, and 149 miles of development from \$56,457 of state funds. Included in the autumn program are forty-five projects aggregating 388 miles to be improved with \$75,000 of state funds and twenty-five projects of seventy-six miles to be improved with \$119,125.98 of federal funds.

To date there has been completed in Illinois 3,512 miles of roadside planting and erosion-control work. In addition, the state has landscaped 158 intersections, developed sixty-three picnic areas at suitable locations on main-traveled highways, planted banks on eight overheads and fifteen subways, completed screen plantings at points to hide storage areas along highway and landscaped seven state police radio stations.

Designs for roadside development follow the pattern of the old country road, utilizing trees and plants indigenous to the areas, but care is exercised by the landscape architects that the plantings in no way cut down sight distances. Tall-growing trees favored include American elm, pin oak, American sycamore, plane tree; Norway hard maple, and honey locust. The American plum, wild crab and thorn are widely used where the design calls for low trees. Virginia creeper and honeysuckle are most commonly used for ground cover.

The federal aid roadside development program calls for approximately seventy-seven miles of landscaping and tree planting along Illinois highways, while the balance of the 465-mile highway improvement program will be carried on with state funds. The state's part of the project calls for tree plantings, landscaping, soil-erosion control, improving and creating picnic sites, screening storage grounds and trimming and removing deadwood in present plantings. The plantings will serve for both soil-erosion control and highway beautification.

1887

1938

We offer for Fall 1938 and Spring 1939

our usual line of

SHRUBS EVERGREENS
FOREST AND SHADE TREES
VINES AND CREEPERS
NATIVE PLANTS

Write for Fall Trade List.

FOREST NURSERY CO., INC.

J. R. Boyd, Pres. McMinnville, Tenn.

Shrubs

Evergreens
Vines

Roses

Lining-out Stock

Send for

CHASE'S TRADE LIST
Fall 1938 Spring 1939
96 pages

CHASE NURSERY CO.
Chase, Alabama

SHADE TREES

4 TO 8-INCH SPECIMENS

Especially grown for better landscape work

Write for Special List

THE SIEBENTHALER CO.
DAYTON, OHIO

WILLIS NURSERY Co.

Wholesale Nurserymen

Write for Catalogue

OTTAWA - - KANSAS

FREEMAN'S WHOLESALE NURSERIES

R. R. 2 Middletown, O.

Specializing in Peach, Black Raspberries and Wilder Currants.

Write for our bargain prices on same for fall and spring.

HOOD NURSERIES

Special Low Prices

Apples—Pink Dogwood
Magnolias—Shade Trees
Evergreens—Shrubbery

Send us your list for quotations.

W. T. HOOD & CO., Inc., Richmond, Va.

THE NEW FREDONIA GRAPE

Grown in the famous Chautauqua-Erie Grape Belt.

Strong 1-year, No. 1 Vines.
LOW WHOLESALE PRICES.

FAIRMOUNT FARM
Perrysburg, N. Y.

New Books and Bulletins

PLANT EXPLORER'S TRAVELS.

Filling 480 pages with a fascinating tale of world travel, plant exploration and introduction, personal reminiscences and historical bits about the rise of the United States Department of Agriculture, David Fairchild's new book, "The World Was My Garden," is difficult to review at all briefly. Mingling brief descriptions of strange foreign places with comments on plants now familiar to us and persons who have become of historical note, his plain statement of facts leads the reader from page to page with the interest of a romantic story. All the time informative observations on plants encountered in diverse countries add to one's botanical knowledge. It is not a book that can be hurried through or read at a sitting, but rather one for enjoyment on many quiet evenings.

The personal history of David Fairchild furnishes a foundation for the career he led. Born in 1869 at Michigan State College, he grew up on the campus there, where his father was professor of English literature. The latter became president of the Kansas State College of Agriculture in 1879, and the second decade of the author's life was spent at Manhattan, Kan. Through an uncle, professor of botany at Iowa State College, he developed his interest in plant research and also met Beverly T. Galloway, who invited the boy to join his staff at Washington at \$1,000 a year.

An appointment at the Naples zoological station enabled him to gain in Italy and later in other parts of Europe the scientific training lacking in this country at that time. There he met Barbour Lathrop, wealthy Chicagoan, who "invested" \$1,000 so that the budding plant scientist could go to Java. This was followed by a trip with Mr. Lathrop through the orient and another around the world, visiting strange places and securing seeds and plants of strange species to send to the United States.

Meanwhile, the office of seed and plant introduction was established in the Department of Agriculture at Washington, up in the attic of the old building, in an interlude between journeys. And from countries all over the globe Dr. Fairchild sent home plants to be tried under American conditions.

Settled in Washington in 1905, he found his contact with famous plantmen and scientists continued through their visits to the plant introduction office. Another romantic expansion of his life and outlook came through his marriage to the younger daughter of Alexander Graham Bell, the inventor of the telephone, broadening his scientific interests. Accomplishment with the camera had begun earlier, and from Dr. Fairchild's great store of photographs over 200 serve to illustrate this book elaborately.

The next twenty-five years were largely spent within the borders of the United States, where his travels were almost as unremitting, to establish plant introduction stations, observe the development of species brought from foreign lands and to study conditions in various sections of the country, to determine the plants suitable to the respective regions. In turn, he sent explorers like Frank N. Meyer to ex-

plore the far east for more plants.

Florida had always drawn Dr. Fairchild with persistent beckoning, and the development of the fruit and vegetable growing industries of that state owe much to him. It was natural that a residence in that state should follow, and for the past twenty years "The Kampong," on Biscayne bay, has been his favorite home.

The lure of travel caught him again in 1924, when Allison Armour invited him to go on a plant-collecting expedition on his yacht. Six years of such expeditions followed, an account of which is given in a book published in 1930, "Exploring for Plants." The cruises continued for another three years.

A long illness and a slow recovery brought to the realization of his friends how much might be lost if the notes of his early days were not set down in printed form. The reader will be grateful that Elizabeth and Alfred Kay assisted Dr. Fairchild in preparing this absorbing description of plant life and travel, just published by Charles Scribner's Sons, at \$3.75 per copy. For anyone, young or old, it is a book of great interest; for persons interested in plants it is doubly so.

OUR NATIONAL FORESTS.

Beginning with the statement that for every citizen of the United States there is one and one-third acres of land in our national forests, William Atherton Du Puy presents a popular and easily read account of these national resources and the federal government's handling of them in a handsome 264-page book entitled "The Nation's Forests," just published by the Macmillan Co.

The lay reader, less acquainted with and less concerned with the government's work in forestry than the average nurseryman, will find this book an interesting approach to the subject, as it is written in a manner at once informative and entertaining. The chapters tell the purpose of the national

forests, how they are managed, the purposes they serve—erosion control, sustained yield of timber, recreation, conservation of wild animal life—and the government's methods of promoting better timber use. Typical examples and incidents are used to tell the story, rather than an array of facts and figures, so that the volume is easy and pleasant reading.

The illustrations are a prime feature of the book, not only for their liberal number, but for their beauty as well as informative value. Many full-page half-tones, handsomely printed in black and white, will cause anyone to thumb through the book for their attraction alone.

Most of the illustrations are from photographs by the United States forest service, while a few are from other sources. The introduction to the book was written by F. A. Silcox, chief of the United States forest service, who cites a few figures to indicate the size and importance of the national forests and compliments Mr. Du Puy on the manner in which he has set down what he has seen in his travels from coast to coast in the national forests and on writing a book easy for the layman to read so as to receive a real understanding of public ownership and management of these basic national resources.

In a handsome green cloth binding, having the title stamped in gold, the book is priced at \$3.

CHANGE in the management of their Burbree Nurseries, Lexington, Mass., is announced by C. R. Burr & Co., Manchester, Conn. The new manager is T. Raymond Rice, well known in the trade. Next spring an assortment of material will be stocked at the Burbree Nurseries for the convenience of wholesale customers of C. R. Burr & Co. in the vicinity of Boston.

Hardy Phloxes

Finest varieties, field-grown and true to name.

Oriental Poppies

Twenty varieties, field-grown, propagated from divisions.

Hemerocallis

Several of the newer varieties.

Evergreens for Lining Out

Well established in 2-inch pots. Reasonable prices. Send for list.

HARMON NURSERY

Prospect, Ohio

NURSERYMEN—ATTENTION

Strong field clumps.

Pink Cushion, \$5.00 per 100.
Red, White, Bronze, \$3.00 per 100.
YELLOW CUSHION, smaller clumps,
\$8.00 per 100.

WONDERLAND NURSERIES, Ellersson, Va.

HERBS

Pot-grown plants; over a hundred varieties. Dried Herbs for Flavoring and Fragrance. Other plants of unusual character and with the charm of old-time gardens.

New Catalogue sent on receipt of 10 cents.

Weathered Oak Herb Farm, Inc.

BRADLEY HILLS, BETHESDA, MARYLAND

PROFITABLE PEONIES

Best varieties. Attractive prices. Fine quality roots, liberally graded.

27th Annual Catalogue ready.

HARMEL PEONY COMPANY

Growers of Fine Peonies since 1911

Berlin, Maryland

PEONIES

All types, including Tree Peonies

The Cottage Gardens

Lansing, Mich.

Asparagus Roots

We offer to the trade one of the largest plantings of 1 and 2-year roots in the east. Write us for prices.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

AMERICAN PLUM SEEDLINGS

Per 100 Per 1000

No. 1	\$ 8.00
No. 2	6.00
No. 3	4.00

HACKBERRY SEEDLINGS

6 to 12 ins.	\$0.75	\$ 6.00
12 to 18 ins.	1.00	9.00
18 to 24 ins.	1.50	14.00
2 to 3 ft.	2.00	18.00

RUSSIAN OLIVE SEEDLINGS

6 to 12 ins.	\$0.75	\$ 6.00
12 to 18 ins.	.90	8.50
18 to 24 ins.	1.25	11.00
2 to 3 ft.	1.50	14.00
3 to 4 ft.	2.00	19.00

CHINESE ELM TRANSPLANTS

4 to 5 ft.	\$12.00	....
5 to 6 ft.	17.00	....
6 to 8 ft.	25.00	....
8 to 10 ft.	40.00	....

These Chinese Elm are select, northern type.

**GEORGE GURNEY
NURSERY**
Yankton, S. Dak.

THORNLESS HONEY LOCUST

Transplanted, straight, heavy trees. Every one nicely branched with good straight leader—ideal L-O stock—they'll make specimens in just one or two years—5 to 6-ft. size for immediate resale to your most critical customers.

*Mile-high grown	10	100
5 to 6 feet	\$4.00	\$32.00
4 to 5 feet	3.00	24.00
3 to 4 feet	2.00	16.00
2 to 3 feet	1.00	8.00

Common thorny type Honey Locust, same sizes at 50 per cent discount. Spring delivery, or will ship this fall if we get your order before the ground freezes.

FRANK M. RICHARD, JR.
P. O. Box 363 Fort Collins, Colo.
*Mile-high grown means heavier, more stocky, hardier trees—better quality.

JEWELL Wholesale

Hardy Minnesota-grown
Nursery Stock and Liners

THE JEWELL NURSERY CO.
POUCH N
Lake City, Minnesota

Our latest revised list of
Lining-out Stock and Finished Stock
was mailed out two weeks ago.

If you have not received your copy kindly write us and we will send you one.

Hill Top Nurseries, Casstown, Ohio

WHOLESALE GROWERS

Specializing in
Evergreen Seedlings
Transplants and Apple Trees
Write for price list.
Send us your trade list.

MATHEWS EGGERT NURSERY
North Muskegon, Mich.

BOLLEANA POPLARS

Choice, well branched, straight stems, with good root system.

6 to 8 ft.	50c	1 1/4 to 1 1/2 in.	90c
8 to 10 ft.	75c	1 1/2 to 2 in.	\$1.25

ESCHRICH'S NURSERY

Sta. F. Route 9, Milwaukee, Wis.

ROSE REGISTRATIONS.

The American Rose Society's registration committee has approved applications for registration of the following roses. Notice of these registrations has been sent to rose organizations in foreign countries and trade papers.

If no objections are raised before November 8, 1938, the registration of these names will become permanent.

Rosenelfe. Polyantha. Said to be a seedling of an unnamed seedling. Originated by Wilhelm Kordes' Sohn, Sparrishoop, Germany, to be introduced by Henry A. Dreer, Inc., Philadelphia, Pa. It is described as of compact habit with leathery foliage; a hardy, free bloomer, with 2-inch flowers opening flat with about fifty petals. The color is bright pink in center with silvery pink on edges and reverse. It has a moderate fragrance and is said to be a continuous bloomer from May to October.

Apricot Dawn. Hybrid tea. Discovered by Melvin E. Wyant, Mentor, O., as a sport of Golden Dawn, to be introduced by himself. Is said to resemble Golden Dawn in everything except color of flower, which in Apricot Dawn is apricot, yellow at base, and lighter at edge. The reverse is pink apricot.

Hon. Lady Lindsay. Shrub. Originated by Niels J. Hansen, Chevy Chase, Md., to be introduced by Bobbink & Atkins, Rutherford, N. J. Said to be a seedling of New Dawn x Rev. F. Page Roberts. It is a straggling bush four to six feet high or more, hardy, producing 2 1/2 to 3-inch flowers with thirty to forty petals. The color is a good pink, shading to yellow at base. It has a medium, sweet fragrance. The plant is considered important because of its excellent and persistent foliage and long period of bloom; it is said to be continuous from May to November.

Treasure Island. Hybrid tea. Originated by Frank C. Ruffel, Stockton, Cal., to be introduced by the Port Stockton Nursery, Stockton, Cal. Said to be a cross of Comtesse Vandal x Mme. Nicolas Ausel. It has 4 1/2 to 5-inch flowers with twenty to thirty petals of flaming copper on the outside and light salmon shading to orange on the inside. It has a moderate fragrance. The plants are upright, of medium growth and bloom intermittently from April to November.

Queen Frances Connally. Hybrid tea. Discovered by L. H. Stell, Tyler, Tex., to be introduced by Stell Rose Nursery, Tyler, Tex. Said to be a sport of Katharine Pechtold with 5-inch flowers of twenty-six to thirty-two petals with fruity fragrance. It is spectrum red inside, with yellow reverse; produced on upright, spreading plants from May to November.

Pink Profusion. Hybrid setigera. Originated by M. H. Horvath, Mentor, O., to be introduced by the Wayside Gardens Co., Mentor, O. Said to be a seedling of Mrs. F. F. Prentiss x Lady Alice Stanley. Flowers are two inches in diameter with eighty or more petals, pink in color; produced continuously from June to November, on upright plants three to four feet high. It is hardy and suggested as a valuable shrub for border use or for hedging.

Hercules. Large-flowered Climber. Originated by M. H. Horvath, Mentor, O., to be introduced by the Wayside Gardens Co., Mentor, O. Said to be a seedling of Doubleblossom x Charles F. Kilham. The flowers are five and one-half to six inches in diameter with fifty to fifty-five petals; they are slightly fragrant and are borne profusely during June and July on vigorous plants with 14 to 15-foot canes. The plant is said to be hardy.

Mabelle Stearns. Hybrid setigera. Originated by M. H. Horvath, Mentor, O., to be introduced by the Wayside Gardens Co., Mentor, O. Said to be a seedling of Mrs. F. F. Prentiss x Souv. de Georges Pernet. The flowers are two and one-half to three inches in diameter, with fifty to sixty petals. They have a strong fragrance and are borne continuously from July to November on spreading plants six feet in diameter and two feet high. The plant is said to be hardy.

Federation. Large-flowered Climber. Originated by M. H. Horvath, Mentor, O., to be introduced by the Wayside Gardens Co., Mentor, O. Said to be a seedling of Mrs. F. F. Prentiss x Director Rubió. It has semidouble, cupped flowers of rosy pink with an orange undertone, and is borne abundantly on a vigorous, climbing plant during June and July. It is said to be hardy.

R. Marion Hatton, Sec'y.

ANOTHER ROSE PATENTED.

An announcement has been received from Rummier, Rummier & White, Chicago, to the effect that the following plant patent was issued October 18, 1938:

No. 295. Rose. Ivar Ringdahl, Rome, N. Y. A new and distinct variety of rose plant, characterized particularly by its abundant dark foliage of heavy substance, its unusually long bud and its prolific production of blooms of exceptionally good keeping qualities. It is of lasting fragrance, a distinctive permanent color between Tyrian red and amaranth purple and has large-size petals.

FALL 1938

ELM, American, Moline and Vase, up to 4 ins. All transplants.

MAPLE, Norway, up to 3 1/2 ins. Transplants, extra select, spaced 7x7 ft.

POPLAR, Lombardy, up to 2 ins.

WILLOWS, Thurlow, up to 3 ins.

BARBERRY, Thunbergii, up to 2 to 3 ft.

SPIRÆA, Vanhouttei, up to 5 to 6 ft.

APPLE, 2-year.

CHERRY, 1-year.

PEACH.

All of above items can be supplied in carload lots.

Send for list on many other items.

C. M. HOBBS & SONS, INC.
Bridgeport, Indiana

Largest Nursery in Indiana. Est. 1876.

BOYD NURSERY COMPANY

McMinnville, Tennessee

WHOLESALE GROWER

of
**Tree Seedlings and
Lining-Out Stock**

Write for Prices on Peach Pits

Apple, Pear, Sweet and Sour Cherry, Plum, Peach, Flowering Crab, 2-year, Amour River Privet, Spiraea Vanhouttei, Tartarian Honeysuckle, Lombardy Poplar.

Our 1-year fruit trees are finest in 40 years' growing nursery stock.

ULLYETTE BROS. NURSERY
Dansville, N. Y.

CHINESE ELMS

All grown here in northern Iowa without irrigation. Resistant to cold, drought and wind. 2-year seedlings, 2 to 6 ft.; also transplants.

Write for prices.

1000 White Spruce, 2 to 4 ft., very fine trees.

GRAETTINGER NURSERY, Graettinger, Ia.

AMOUR RIVER NORTH PRIVET HEDGING

Extra fine, low branched, young, smooth, pretty. As fine Privet as ever grown. Will make you pretty dollars and "come again customers." Special for CASH:

18 to 24 ins., 4 br. up	Per 1000 \$25.00
12 to 18 ins., 2 br. up	15.00

Cash. Packing free.

ALTA VISTA NURSERIES Davenport, Iowa

GRAPEVINES

800,000 of the finest grapevines we ever grew await your order. All the leading varieties in 1 and 2-year size. Get our price list before placing order.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

OBITUARY.

William T. Cowperthwaite.

Minnesota nursery interests suffered a deep loss in the death of William T. Cowperthwaite, St. Paul, last week. Mr. Cowperthwaite had for many years been head of the landscape department of Holm & Olson, Inc., St. Paul, and at the time of his death was secretary of the Minnesota State Nurserymen's Association. After a week's illness he appeared to be better Sunday, October 16, but late in the day he succumbed to pneumonia, leaving his widow and a sister as survivors.

Born at St. Louis, Mo., he obtained his education in a city high school there and later gained B. S. and M. A. degrees at the University of Missouri.



W. T. Cowperthwaite.

Subsequently he worked at the Missouri Botanical Garden and later became park forester of St. Louis. In January, 1914, he went to St. Paul, where he joined Holm & Olson, Inc., in the landscape department. He had written a number of articles on landscaping and allied subjects for horticultural papers. He was also an ardent worker in the trade; besides serving the state nursery group as secretary, he had held the same position with the Twin Cities Nurserymen's Association.

Interment was at Ridgefield, N. J., after services at St. Paul. Attending the funeral were members of the firm and a number of employees, both from the store and the nursery. Many members of the local and state nurserymen's associations were present, as well as out-of-town representatives of the trade. Among those at the services were: Harold Case, of the Mount Arbor Nurseries, Shenandoah, Ia.; C. H. and J. K. Andrews and A. M. Brand, Faribault, Minn.; D. M. Mitchell, E. Cashman and Mr. Warren, Owatonna; J. V. and Vincent Bailey, Newport; Mr. Siefert, Stillwater, and E. C. Killmer, J. Juhl, John Hawkins and Louis Sando, of the University Farm, all of St. Paul.

Wallace G. Gomersall.

Wallace G. Gomersall, Nyack, N. Y., proprietor of a nursery and greenhouses for forty years, died October 16 after

a lingering illness, at the age of 80 years.

Mr. Gomersall was a native of England, where he was graduated from the Kensington Agricultural College. After extensive experience in landscape gardening and nursery work in England, he came to the United States in 1890. In 1903 he acquired the Grand View Nursery, which had been established five years earlier. Mr. Gomersall was a Mason, belonging both to the Rockland lodge, F. A. M., and Rockland chapter, Royal Arch Masons. Surviving are his widow; two sons, Robert and Edward, and three daughters, Alice, Annie and Dorothy.

G. H. Haack.

The funeral of G. H. Haack, well known landscape man, was held October 18. Mr. Haack was landscaping specialist in the city park bureau for thirty-seven years and had laid out a number of the city's most notable parks. The sunken gardens in Peninsula park were under his supervision, and these were actually the forerunners of the national rose test gardens which were later developed at Washington park. A year ago he retired from the service of the city of Portland. He was born in Thiergart, Germany, in 1857, and came to this country at the age of 18. He was located at Chicago for some time and came to Portland in 1889, going into the park service a few years later. Surviving him are his widow, Marie J. Haack, and two daughters, Mrs. Frank W. Land and Lillian C. Haack.

CUMBERLAND BUILDS OFFICE.

Offices of Cumberland Valley Nurseries, Inc., McMinnville, Tenn., were moved recently from town to a farm recently purchased by the company, on the Nashville highway. In addition to a modern office building, a frostproof storage and packing shed has been constructed. The land has been improved and stock planted for the trade.

J. R. Bragg, president of the company, intends in the near future to build a modern home on the site. Other officers include W. W. Bragg, vice-president, and Mrs. Neva C. Bragg, secretary-treasurer.

The company conducts a retail and wholesale business embracing a complete line of nursery stock. For the past several seasons it has placed special effort on peach trees in North and South Carolina, where they have made a canvass of commercial peach orchard men. The territory has been handled by Walter R. Bragg in North Carolina, and Woodrow W. Bragg and Clyde Potter in South Carolina.

LINING-OUT STOCK

	Per 1000
Acer Palmatum, strong slgs., 5 to 10 ins.....	\$10.00
Syringa Vulgaris, strong slgs., 6 to 12 ins.....	20.00
Rosa Wichuraiana (true), strong slgs., 12 to 18 ins.....	20.00
Red Barberry, strong trans., 12 to 18 ins.....	50.00

Ask for complete list of lining-out stock and finished landscape material.

C. HOOGENDOORN

Turner Rd.

Newport, R. I.

BUSINESS RECORDS.

Quincy, Ill.—George R. Frese, doing business as the Forest Oak Nurseries, who was adjudicated bankrupt August 1, 1938, has filed a petition for discharge, and the court has set November 7 as the date by which creditors are to make response.

New York, N. Y.—A voluntary petition under chapter XI of the Chandler act has been proposed by the F. W. Kelsey Nursery Co., 50 Church street, listing liabilities of \$48,418 and assets of \$3,863. The proposed arrangement provides for the issuance of notes equivalent to twenty-five per cent of the claims maturing in three years and distribution of preferred stock equivalent to twenty-five per cent to creditors.

CENTRAL CALIFORNIA MEETING.

Richard Plath, of H. Plath & Sons, San Francisco, Cal., was elected president of the Central California Nurserymen's Association at the annual meeting held at San Francisco October 20. Walter Boreher, of W. J. Clarke & Co., San Jose, was elected vice-president, and Frank Tuttle, San Jose, was reelected secretary-treasurer. Membership in the association is now 124, according to the re-will be held November 17 at San Jose. port at the meeting. The next meeting

CLARKE ADDRESSES CLUB.

W. B. Clarke, of W. B. Clarke & Co., San Jose, gave an interesting account of his trip through England, France, Belgium and Holland at the California Horticultural Society meeting, October 17, at San Francisco. Mr. Clarke had the privilege of visiting many of the larger private gardens in England, besides the shows which he went especially to visit. After the talk the members viewed the exhibits, which included camellias from Domoto Bros. and Korean chrysanthemums, which Major Vanderbilt is working with.



WRITE
for our
WHOLESALE
TRADE LIST

giving
descriptions and prices
on our complete line of

EVERGREENS
Lining-out Stock
Balled Stock

SHERWOOD
NURSERY CO.

EVERGREENS

Propagators & Growers

141 S. E. 65th Avenue
PORTLAND, ORE.

Oregon-grown ROSEBUSHES

Send
for
List

PETERSON & DERING, Inc.
Wholesale Rose Growers
SCAPPOOSE, OREGON

A. MCGILL & SON

FAIRVIEW, OREGON

Wholesale Only

ROSES

Send us your list of wants

Fruit Tree Seedlings
Flowering Ornamental Trees
Shade Trees

Grown right and packed right

Combination carloads to eastern distributing points save you on freight.

New Rose TEXAS CENTENNIAL (Red Hoover)

Plant Patent No. 162

Ask for color illustration and prices.

Also for our general list of roses.

DIXIE ROSE NURSERY
Tyler, Texas

HARDY
Rosebushes
for 1938-39
HOWARD ROSE CO.
Hemet, California



ORENCO NURSERY CO.

Orengo, Oregon

Wholesale Growers

Fruit, Shade, Flowering Ornamental
Trees, Fruit-tree Seedlings, Roses, Etc.
Very complete line of quality stock

Catalogue sent on request.

PACIFIC COAST NURSERY

1436 N. E. Second Ave. PORTLAND, ORE.
Largest Fruit Tree Seedling Growers
in America.

We accept growing contracts for 3 to 5 years.
Quality stock. References on request.

John Holmason, Prop.

NORTH JERSEY MEETING.

The North Jersey Metropolitan Nurserymen's Association met at the Bergen county courthouse, Hackensack, October 13.

The meeting was opened by President Charles Hess, who outlined a program of speakers to be heard at each of the coming winter meetings of the association, including G. G. Nearing, who promised to explain his method of propagating rhododendrons from cuttings.

After President Hess had presented plans and specifications of a planting job, which the late Harold E. Wettyn, Passaic county agricultural agent, had prepared for his church and had not completed at the time of his death, the association decided to plant the job as a memorial to the Passaic county agent who had done so much for the association.

Reporting for the editorial committee, William Flavel stated that the association had voted to sponsor a contest through Garden Craft, giving three prizes of nursery stock, of the winners' selection, valued at \$25, \$15 and \$10, for the best letters received about some tree or shrub giving the owner the fondest memories of some friend or relative, living or departed. These letters will become the property of the association and will be printed in Garden Craft.

The purpose of the contest is to educate the public to give friends a tree or a group of trees for birthdays, anniversaries and Christmas. Each month a card will be enclosed in copies of Garden Craft, which when filled out and sent to some nurseryman will be an order for some kind of a plant to be delivered at the proper time for a friend's birthday, anniversary or Christmas.

William Halliey, Sec'y.

NURSERYMEN EXHIBIT AT HUB.

There was a good attendance at the meeting of the Gardeners' and Florists' Club of Boston October 18. Exhibits, which consisted entirely of hardy chrysanthemums and berried shrubs, filled the exhibition tables. Breck's showed a group of Korean chrysanthemums in variety, while W. N. Craig had thirty varieties, mainly Korean, as well as montbretias, tuberose and some hardy perennials. He also showed a heavily flowered pan of Viola odorata semperflorens, which blooms through the entire season and is exceedingly fragrant. Blue Hill Nurseries had a fine collection of fruiting hardy shrubs, and Herbert Baxendale exhibited a plant of a new light pink hardy aster.

W. A. Francke, Brookline, was introduced. He gave an extremely interesting talk on tree surgery, moving big trees and salvaging trees partially uprooted during the recent hurricane. He showed many slides to illustrate his remarks and answered many questions, after which he was accorded a rousing vote of thanks.

DAN PURPLE has established a nursery business at Brace, Wash.

LINCOLNDALE NURSERY, INC., Lincoln-dale, N. Y., has been incorporated.

WILLIAM BORSCH, head of William Borsch & Son, Inc., Maplewood, Ore., was stricken with a heart attack early in October and is now bedridden. His son, Fred J. Borsch, is carrying double load in the nursery for the present.

FRUIT and SHADE TREE SEEDLINGS

Oregon and Washington Grown
Apple, Pear, Mahaleb, Mazzard,
Myrobalan

Quince (rooted cuttings)

Chinese Elm Seedlings

Complete Line General Nursery Stock.

Chinese Elm, Transplanted Specimens.

Norway Maple, Lining-out Whips.

Send list of your wants for prices.

New catalogue now ready.

Combination carloads to eastern distributing points.

MILTON NURSERY CO.

A. Miller & Sons, Inc.

Since 1878

Milton, Oregon

Portland Wholesale Nursery Co.

306 S. E. 12th Avenue

Portland, Oregon

To the Trade Only

A complete line of
Nursery Stock and
Nursery Supplies.

Catalogue sent on request.

CONTRACT GROWERS ONLY

We do not grow for open market, either retail or wholesale, therefore do not compete with our contractors. This permits early and prompt shipments. Let us quote you on Apple Grafts, Chinese Elm and Hackberry Seedlings.

WASHINGTON NURSERIES

Toppenish, Wash.

MANETTI

Dormant Buds

Multiflora Japonica, rooted cuttings.

Quince stocks and seedlings.

ENSCHED NURSERY

Hillsboro, Ore.

FRUIT TREE SEEDLINGS

	Western-Grown	Per 1000
Apple, 3/16-in.		\$12.00
French Pear, 2/16-in.		12.00
Myrobalan Plum, 1/4-in.		12.00

These are well graded, sturdy, healthy seedlings, on which we do our own budding and are sure to please. Supply limited.

C. R. BURR & COMPANY, INC.

Dept. A—Manchester, Conn.

Please Mention

THE AMERICAN NURSERYMAN
when writing advertisers

IF YOU plant
**Tennessee
Natural Peach Seed**

you will not be sorry. Reliable and Dependable. Write for prices on 1937 crop. 6000 to 7000 seeds to the bushel (50 lb.)

Fruit Trees, Shade Trees,
Ornamental Trees,
Shrubs and Evergreens

Southern Nursery & Landscape Co.
Winchester, Tennessee

PEACH PITS

THE
**Howard-
Hickory
Company**
Hickory, N. C.

LAWN GRASS SEED

100 lbs.
Velvet Lawn Mixture.....\$12.50
Kentucky Bluegrass, extra fine... 12.50
Redtop, fancy silver seed..... 12.00
American Rye Grass..... 6.75

A. H. Hummert Seed Co.
2746-48 Chouteau Ave.
St. Louis, Mo.

PEACH PITS

Our Pits Compare Favorably
With the Best

HOGANSVILLE NURSERIES
HOGANSVILLE, GEORGIA

MAZZARD PITS, clean

Also special quotations —
**APPLE, OLIVE AND
NORWAY MAPLE SEED.**

COLUMBIA BASIN NURSERY
Wenatchee, Wash.

FOR SALE

Modern nursery with about 8 acres of ornamentals, mostly evergreens, situated in excellent business locality of upper south Georgia; prosperous trade; 115 acres of land, 40 in cultivation; 1 greenhouse, lath house, one 7-room dwelling, one 3-room dwelling and other necessary buildings. Due to ill health, will sacrifice either nursery stock alone or with land.

Kirkland's Nurseries, Cobbtown, Ga.

CLASSIFIED ADVERTISING

Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Gardens, Sinking Spring, Pa.

Apple and Pear Trees, 2-year, 20c each. Bred up Concord Grapevines, 10c each. Walker's Nurseries, Fordsville, Ky.

Mertensia Virginica, large, \$60.00 per 1000; small, \$30.00 per 1000. Pfister's Juniper, potted liners, 6 to 8 in., heavy, \$140.00 per 1000.

Taxus Cuspidata, 2-year seedlings, \$60.00 per 1000. Cash. Hook's Nursery, Box 25, Highwood, Ill.

SOUTHWESTERN NOTES.

G. G. Roles, for many years a nurseryman at Edna, Kan., has formed a partnership with Frank R. Clark, Coffeyville, Kan. They will operate the Coffeyville Nursery, located four and one-half miles west of Coffeyville on U. S. highway 166. Mr. Roles is in active charge of the nursery.

The Sonderegger Nurseries, Beatrice, Neb., have drawn plans for the improvement of parks at Fairbury, Neb. Bids will be taken for the nursery stock required to carry out the plans.

Henry Chase, president of the Chase Nursery Co., Chase, Ala., is spending a few weeks calling on the trade in the middle west before the rush of autumn work. He reports that sales are just about keeping up with last year. The past growing season has been excellent. This is the forty-ninth year this company has been in business.

The extremely dry weather that has prevailed in the middle west in September and October has been a serious handicap to the nursery business. Reports from nurserymen show that drought conditions prevail in Nebraska, Kansas, Oklahoma, north Texas, Arkansas, Missouri and parts of Iowa, making it difficult to dig and ship, particularly evergreens. The soil is so dry that evergreen balls fall to pieces in transit. Nurserymen have orders booked for autumn delivery, and if weather conditions were favorable business would be good over the entire territory, but because of the condition of the ground practically no planting is being done. Even if rain should come in time to permit some autumn planting, the season will be cut short, and nurserymen fear that it will be impossible to make up the loss they have suffered.

Some nurserymen report that their autumn trade this year is the poorest since they have started in business, due solely to drought conditions. Many weather records have been broken. Temperature in Kansas City October 14 was 91, while the high reading for the same date the year before was 49.

A. L. Cook, of Cook Gardens, Ottawa, Kan., has been awarded a contract for roadside beautification in Mahaska county, Iowa, on Iowa highway 163 near Oskaloosa.

Harold Cole is starting a nursery at Cherokee, Okla.

T. A. Milstead, of the Shawnee Nurseries, Shawnee, Okla., who has been ill all summer, is sufficiently recovered to be back at work. He reports that bookings have been good, but practically no planting is being done because of dry weather.

The third daughter born to Governor and Mrs. Lloyd C. Stark died when 9 days old at St. Luke's hospital, St. Louis, Mo., of respiratory failure October 23 and was buried at Louisiana, Mo. Molly and Katherine are the other daughters. The governor has two sons by a previous marriage, Lloyd Stickney Stark and John Wingate Stark; their mother died in 1930.

KANSAS SCHOOL NEXT MONTH.

December 10 to 12 will be busy days at Kansas State College, Manhattan. A college horticultural show will be staged on these days by the students in the department of horticulture under the direction of the faculty. One purpose of

Table of Contents

Wages and Hours Law.....	2
Don't Fear Elm Disease.....	2
Clematis Lawsoniana.....	2
Root Hardwood Cuttings with Acids (illus.).....	3
By V. T. Stoutemyer	
Analysing Advertising.....	5
Tear Out Nuisance Trees.....	5
Business Building.....	6
By Vic Eckdahl	
Courses in Gardening.....	6
From Arboretum to the Nursery.....	7
By Leon Croizat	
Oregon President.....	8
—C. Bert Miller (portrait).....	8
New Jersey Tree Men Meet.....	8
New and Uncommon Perennials.....	9
By C. W. Wood	
New Red Raspberries.....	10
Notes from a Nurseryman's Wife.....	10
Lists of Best French Lilacs.....	11
American Association of Nurserymen 12	
—Plant Descriptions.....	12
—Keep After Collections.....	13
Showy Blueberries.....	13
Charlie Chestnut.....	14
Tells How to Raise Your Own Living	
Fruit Crops.....	16
Suckers on Filberts.....	17
Forestry Committee Meets.....	18
Plant Illinois Roads.....	19
New Books and Bulletins.....	20
—Plant Explorer's Travels.....	20
—Our National Forests.....	20
Rose Registrations.....	21
Another Rose Patented.....	21
Obituary.....	22
—William T. Cowperthwaite (portrait).....	22
—Wallace G. Gomersall.....	22
—G. H. Haack.....	22
Central California Meeting.....	22
Cumberland Builds Office.....	22
Business Records.....	22
Clarke Addresses Club.....	22
North Jersey Meeting.....	23
Nurserymen Exhibit at Hub.....	23
Southwestern Notes.....	24
Kansas School Next Month.....	24
Texas Notes.....	25
Beaumont Florists Active.....	25
Catalogues Received.....	25

"SAVE THAT TREE!"
Use THE NEW DAVIS TREE-TYE

Soft, durable rubber, reinforced with double-strength woven fabric protects life arteries of your trees. All lengths and wire sizes. Practical for trees and shrubs, neat, **ECONOMICAL**—use many times. Write Garden Equipment Headquarters.

JOHN BEAN MFG. CO.
 233 E. 3rd St., LOS ANGELES, CALIF.

LABELS FOR NURSERYMEN

THE
BENJAMIN CHASE COMPANY
 DERRY, N. H.

NURSERY TOOLS

Nursery Spades, Kunde Knives and Pruning Shears, Budding and Grafting Supplies. Free 58-page Catalogue.

A. M. LEONARD & SON
 Piqua - Ohio

SEEDS

Tree and Shrub
 Perennials

HERBST BROTHERS

92 Warren St., New York, N. Y.

NORTH DAKOTA SEEDS

Juniperus communis depressa
Juniperus scopulorum, c.s.
Arctostaphylos Uva-ursi
Rhus trilobata (western aromatic sumac)
Rosa Woodsii, Ball Cactus (*Mammillaria vivipara*) and *Amelanchier canadensis*.

E. C. MORAN Medora, N. D.

NORTHERN-GROWN SEED

Douglas Fir, Rocky Mountain type, \$3.00. Grand Fir, \$2.50. *Juniperus scopulorum*, 60s., J. communis, \$1.00. J. horizontalis, \$1.00. *Mahonia repens*, *Shepherdia canadensis*, *Sambucus glauca*, *Clematis columbiana*, *Anemone*, *Pentstemon*, *Lewisia*, *Mimulus* and many others. Are you on our mailing list?

NATIVE EVERGREENS, MISSOULA, MONT.

We are collectors of
NORTHERN MINNESOTA TREE SEEDS

including
Pinus Banksiana, Jack Pine
Pinus Strobus, White Pine
Pinus Resinosa, Red Pine
Picea Canadensis, White Spruce

Write for samples and prices.

Bear Creek Evergreen Nursery
 Aitka, Minnesota

the show is to give students experience in setting up shows. The exhibits will include fruits, vegetables, flowers, nursery products and landscape drawings.

The Kansas Association of Landscape Architects will hold a meeting at the college December 11, and the Kansas school for nurserymen will be held there on December 12. The school, conducted for the first time last year, was so successful that the nurserymen requested the college to repeat it this year. There will be no tuition, and anyone in the trade may attend.

TEXAS NOTES.

The Gulf Oil Co., over station KPRC, Houston, recently sponsored a program having as the speaker on the "Garden of the Air," W. C. Griffing, Beaumont, whose subject was "Trees." Mr. Griffing recommended the live oak tree of the Spanish type for the gulf coast area and stressed the point that it is no longer necessary to plant small trees, as nurserymen are now conversant with technique to make it possible to transplant mature trees.

The railroad commission of Texas recently passed rate revisions on which there had been no protest at a hearing last July. The increase of rates on nursery stock was protested by the nurserymen, and the commission is holding its decision in abeyance, so the rates as of before June 20 hold until the commission rules otherwise.

BEAUMONT FLORISTS ACTIVE.

At a meeting of the Beaumont Florists' & Nurserymen's Association held October 6 at the home of A. C. P. Tyler, Beaumont, Tex., the following committees were named to work on the club exhibit for the south Texas state fair:

In charge of the florists' division, Mrs. M. S. Murchison; nursery and landscaping exhibit, Mr. Tyler; design and arrangement of space, P. A. Winkler, Philip Newman and L. A. Williams; amateurs' exhibit, Carl Johnson, and garden and the nature clubs, Mr. Winkler.

W. C. Griffing was named general chairman of arrangements for the exhibit.

CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

Charles Malmo Nursery, Seattle, Wash.—Booklet as fall 1938 bulb and rose catalogue. Listed are flowering bulbs, patented roses, standard roses and climbing roses.

E. D. Smith & Sons, Ltd., Winona, Ont., Canada—Three mimeographed sheets as special offer of northern-grown evergreen and deciduous trees for fall 1938 and spring 1939.

Carroll Gardens, Westminster, Md.—A pocket-size booklet of sixty pages listing perennials and alpine plants. Included in the listing are roses, bulbs, evergreens and shrubs.

Oreco Nursery Co., Oreco, Ore.—A 56-page booklet as wholesale price list for the trade for fall 1938 and spring 1939. Listed are fruit trees, nut trees, ornamentals, deciduous shrubs and small fruits.

Baker Bros. Nursery, Fort Worth, Tex.—A pocket-size booklet of twenty pages listing general nursery stock for the wholesale trade. Listed are evergreens, shade trees, shrubs, fruit trees and lining-out stock.

Klyono Nurseries, Crichton, Ala.—A 36-page pocket-size price list for fall 1938 and spring 1939. The listing includes azaleas, camellias, magnolias, conifers and shrubs.

Conard-Pyle Co., West Grove, Pa.—An 8-page pocket-size booklet as red circle rose list for the trade for the season 1938 to 1939. Listing includes red circle roses and other patented varieties.

Lester Rose Gardens, Watsonville, Cal.—Two mimeographed sheets as wholesale price list for the trade listing callas, campanulas, wild flower seeds and geranium seeds.

AMAZING NEW WINTER MULCH

SEND FREE FOR BOOKLET

CORNING Mulching Wool, "the non-melting snow", is a light-weight, billowy blanket of pure glass fibres. It is a winter overcoat to protect prized plants. For free booklet describing amazing results obtained at leading test gardens and agricultural schools, write Fibre Products Division, Dept. 54, Corning Glass Works, Corning, New York.

PROTECT

TREES - SHRUBS

against Rabbits

with **COPPER SOAP**

RODENT REPELLENT

Easily applied—economical—effective. Single application lasts an entire year. Quart, \$1.00 postpaid—covers 50 trees; Gallon, \$3.00; 5 gallons, \$12.50.

Write for detailed literature.

SPECIAL PRICES TO NURSERYMEN

Castle Chemical Co.
 Castle Rock, Minn.

ROOTONE

PATENTS PENDING

the **HORMONE SOAP**

1 lb. can, \$5.00

Booklet on request

AMERICAN CHEMICAL PAINT CO., Ambler, Pa.

Nursery and Florist **MOSS**

Wire or burlap bales, large size. If you are interested, drop us a card. We shall be pleased to quote you our lowest possible price. Have been in the moss business since 1896. This should mean something to you. The oldest dealer in the state. Our reference—Dun & Bradstreet, Inc.

THE MOSS CO.,

Mather, Wis.

ARIENS-Tiller



The American
TILLAGE COMBINE
3 MODELS TO FIT
EVERY NEED

ARIENS CO.
 Box 710 Brillinn, Wis.

CLARK GARDNER NURSERIES

Osage, Iowa

Originators of patented **SEMI-POT-TED PLANT AND BULB PACKAGE** for over-counter trade. **HAN WATER-ING TUBE** and other unique features.

BANISH COLD, SLEET, SNOW & ICE with No. 99

99 AEROIL WEED BURNER FREE

Winter No. 99

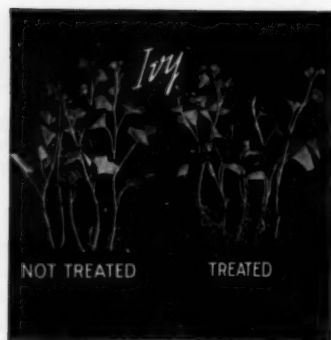
ARIENS-Tiller

ARIENS CO.

Box 710 Brillinn, Wis.



HORMODIN "A"



... the Easy Way to Root Cuttings

One simple, inexpensive treatment with Hormodin "A" stimulates rapid root growth on cuttings, making it possible to propagate plants from cuttings at considerable savings. Even hard to root varieties are propagated readily. The quicker, better rooting produced with Hormodin saves time and assures success when used as directed.

Every batch of Hormodin "A" is tested for root-growing power. Each package contains tested, easy-to-follow directions. The cost of Hormodin is small—only a fraction of a cent per cutting. Get a bottle from your supply house today.

MERCK & CO. Inc.
Manufacturing Chemists
RAHWAY, N. J.

INDEX TO ADVERTISERS

Aerol Burner Co.	25	Howard Rose Co.	23
Alta Vista Nurseries	21	Hummert Seed Co., A. H.	24
American Chemical Paint Co.	25	Jackson & Perkins Co.	18
American Florist Supply Co.	27	Jewell Nursery Co.	21
Andrews Nursery	19	Kingsville Nurseries	15
Ariens Co.	25	Koster Co., Inc.	15
Barteldes Seed Co.	28	Le-Mac Nurseries	19
Bay State Nurseries, Inc.	17	Leonard & Sons, A. M.	25
Bean Mfg. Co., John	25	Lovett, Lester C.	15
Bear Creek Evergreen Nursery	25	Mathews Eggert Nursery	21
Bobbink & Atkins	14	McGill & Son, A.	23
Bountiful Ridge Nurseries	15	Meehan Co., Thomas B.	17
Boyd Nursery Co.	21	Merck & Co., Inc.	26
Brown Bros. Co.	17	Milton Nursery Co.	23
Burr & Co., C. R.	23	Moran, E. C.	25
Campbell-Hausfeld Co.	28	Moss Co.	25
Carpenter & Co., Geo. B.	27	Mount Arbor Nurseries	16
Castle Chemical Co.	25	Native Evergreens	25
Chase Co., Benjamin	25	Oberlin Peony Gardens	24
Chase Nursery Co.	19	Offenberg Nursery Co., Paul	17
Cloverset Flower Farm	28	Orenco Nursery Co.	23
Colorado Seed Co.	28	Pacific Coast Nursery	23
Columbia Basin Nursery	24	Perma Tag & Label Co.	27
Corning Glass Works	25	Peterson & Dering, Inc.	23
Cottage Gardens	20	Portland Wholesale Nursery Co.	23
Dixie Rose Nursery	23	Princeton Nurseries	15
Dow Chemical Co.	28	Process Color Printing Co.	27
Enschede Nursery	23	Rambo's Wholesale Nurseries, L. J.	19
Eschrich's Nursery	17-21	Richard, Jr., Frank M.	21
Evergreen Nursery Co.	17	Scarff's Nurseries	19
Fairmount Farm	19	Shenandoah Nurseries	17
Forest Nursery Co.	19	Sherman Nursery Co.	19
Foster Nursery Co.	19	Sherwood Nursery Co.	22
Freeman's Wholesale Nurseries	19	Siebenthaler Co.	15-17-19
Garden Shop, Inc.	28	Southern Nursery & Landscape Co.	24
Gardner Nurseries, Clark	25	Springdale Nursery	15
Graettinger Nursery	21	Storrs & Harrison Co.	13
Gurney Nursery, Geo.	21	Sunny Ridge Nursery	18
Harmel Peony Co.	20	Townsend Sons Nurseries,	
Harmon Nursery	20	E. W.	15-18-19-20-21
Herbst Bros.	25	Ulyette Bros. Nursery	21
Hess' Nurseries	15	Visser's Nurseries	17
Hill Nursery Co., D.	17	Walker's Nurseries	24
Hill Top Nurseries	21	Washington Nurseries	23
Hobbs & Sons, C. M.	21	Waynesboro Nurseries, Inc.	15-17
Hogansville Nurseries	24	Weathered Oak Herb Farm	20
Hood & Co., Inc., W. T.	19	Westminster Nurseries	15
Hoogendoorn, C.	22	Willis Nursery Co.	19
Hook's Nursery	24	Wonderland Nurseries	20
Howard-Hickory Co.	24	Wyman's Framingham Nurseries	18

SHORTAGES in other sections create demand for your SURPLUS

Read by most nurserymen in every state

AMERICAN NURSERYMAN

can help you turn your stock into cash.

Don't miss sales — advertise now!

Nursery SUPPLIES

**Tools and Labels
IMPLEMENTS
Spraying Equipment
TUBS—Chinese
Insecticides
FERTILIZERS
GENERAL SUPPLIES
Send for Free Catalogue**

AMERICAN 
FLORIST SUPPLY
... 1335
W. Randolph St. **CHICAGO**

TAGS—LABELS

Packed 1000 per box. No boxes broken.

	Per 1000	Painted Plain
Tree Labels, 11/16 in. x 3 1/2 ins.	\$2.10	\$1.70
5 lbs., Copper Wired.....	2.25	1.85
Dahlia Labels (Same)		
5 lbs., Heavy Copper Wired.....	2.25	1.85
Post Labels, 11/16 in. x 4 ins.		
1 lbs., per box of 1000.....	1.90	1.50
Above Labels made from selected White Pine.		
Dura-Labels, 5/8 in. x 3 1/2 in.		
2 lbs., paper (Iron Wires).....	1.50	
PERMA-TAGS—5/8 in. x 6 1/2 ins., 2 lbs.		
Improved Type, All One Piece, All Metal Label		
Boxes contain approximately 1000 packed by weight.		
Zinc. Most popular number.....	2.45	
Aluminum. Light in weight, durable.....	3.45	
Copper. Most durable number.....	3.45	
Shipping Tags, No. 5 size 6 lbs. per 1000		
2 1/2 ins. x 4 3/4 ins.....	1.50	
Shipping Tags, No. 8 size 11 lbs. per 1000		
2 1/2 ins. x 6 1/4 ins.....	2.95	

PRICES F.O.B. Grand Rapids, Mich.
If wanted by Mail, add postage on weights given.
Write for Quantity Price List and Discounts
with Prices of PRINTED TAGS and LABELS.

PERMA TAG & LABEL CO.

Box R23, Creston Sta., Grand Rapids, Mich.

TWINES FOR NURSERYMEN

Carpenter carries large stocks of Sisal, Java, Jute, Cotton and many other kinds of twines. Send sample of what you use, tell us purpose and we'll recommend best type for job and quote prices. No obligation.

"Knots the Sailors Use," 79 pictures, 8 pages, fine booklet, FREE. Tells how to tie almost every useful knot. Get your copy today.

GEO. B. CARPENTER & Co
CHICAGO, ILLINOIS

SPECIAL OFFER

Sample Copy Plate Book, 50c
Prints, Maps and Folios
Process Color Printing Co.

701 Searle Bldg., Rochester, N. Y.

THE GARDEN DICTIONARY

Pre-publication Special Price

\$6.50 (Trade Edition)

The wide sale of this work in the library edition at \$16.25 testified to its value as an up-to-date reference volume as emphatically as the praise of horticultural authorities.

The trade edition announced by the publishers to come from the press November 15 will sell at \$7.50. On orders received before November 10 a saving of \$1.00 is available.

The nurseryman who is asked frequent questions by customers will find this volume on his counter a quick source of information. It is a mine of horticultural data readily accessible.

Place your order promptly to obtain the low pre-publication price.

Simply written, the Garden Dictionary is easily understandable by persons unversed in botanical terminology. Yet while meeting a popular need, it does not sacrifice thoroughness of information. Common names are listed, 4400 of them, with cross references to the botanical names, under which description is given. There are given the preferred pronunciation, the origin of the generic name and the family to which it belongs. Then follows a simple non-technical description of the genus, how it is grown and propagated and the proper soil mixture. Under the name of the genus appear descriptions of each species, what type of plant it is, height, character of leaves and flowers, blooming period, country of origin and hardness, the last indicated by reference to the zone map of this country.

Special articles cover such particular information as seasonal and color gardens, descriptions of important plant families, growing conditions in each state and each Canadian province, lawns, rock gardens and other landscape features.

The book is 9x11 inches, two and one-half inches thick, bound with extra thick covers and contains 896 pages.

896 large pages of accurate, up-to-the-minute horticultural data. Over 500 illustrations and 2 color plates.—54 maps. Many feature articles by 68 nationally recognized horticulturists and landscape gardeners. 11,292 entries and 1,200,000 words about almost every conceivable subject pertaining to gardening, horticulture and landscape design.

AWARDED GOLD MEDAL

by Massachusetts Horticultural Society for being "the most notable horticultural book which has appeared in America in recent years."

Send your order and remittance of \$6.50 to reach us by November 10 to get this special price.

AMERICAN NURSERYMAN

508 S. Dearborn St.

Chicago, Ill.

SAVE THOSE TRANSPLANTS! USE DOWAX

DOWAX*, the scientific wax emulsion for preventing drying out of trees and shrubs, has accomplished remarkable results in reducing mortality among transplants. By applying DOWAX, one user transplanted eighty different varieties of shrubs in full leaf during July with practically no loss.

Other reports from users of DOWAX indicate its outstanding success in reducing mortality among large transplanted shade trees, in reducing winter injury to ever-

greens and promoting growth of backward shrubs and trees. Users report DOWAX superior to wrapping for borer control, and for reducing transpiration of thin-bark trees. DOWAX can be applied with any type spray equipment. Its semi-permeable, moisture-conserving film does not penetrate or injure plant tissue—cannot melt or run. Use this scientific material to protect your trees and shrubs. It will pay you dividends in greatly reduced replacement costs.

Vitalize Your Transplants with DOWAX

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Branch Offices: 30 Rockefeller Plaza, New York City; Second and Madison Streets, St. Louis; Field Bldg., Chicago.

*Trade Mark Reg. U. S. Pat. Off.



WRITE FOR THE DOWAX BOOKLET TODAY

Make More Profit

Sell Your Roses, Perennials, Shrubs, Vines and Fruit Trees Started and Growing in

CLOVERSET PLANT POTS



Patent No. 2073695

Nursery Stock grown in Cloverset Patented Pots can be sold and planted without wilt to bud or bloom any time. Hardy Chrysanthemums grown in Cloverset Pots will make money for you. Write today for Free Illustrated circulars and testimonials from users of these pots.

Carton of samples by mail 25c.

Cloverset Flower Farm

ERNEST HAYSLER and SON
105th Street and Broadway, Kansas City, Mo.

write for free literature on

AUTOMOTIVE TREE MOVERS

manufactured by

THE GARDEN SHOP, Inc.

Manufacturers of Labor-Saving
Devices for Nurserymen

4819 Mission Rd. Kansas City, Kan.

WRITE FOR 10-DAY TRIAL OFFER on this High Pressure PARAGON SPRAYER



TEST it for yourself. Compare results with what you have been getting from your present sprayer. Use any spray solution or cold water paint. Spray your nursery stock, whitewash your greenhouses, barns and tool sheds, **inside and out**. Note how easily this **Paragon** delivers powerful uniform pressure at the nozzle with little effort at the pump handle. Passes through narrowest aisles without jamming at corners. Automatic agitator prevents solution from settling. We guarantee it **never to clog** while in use. Ten days trial costs you nothing if not satisfied. If your dealer does not sell the Paragon, mail the coupon today.



Paragon
No. 3
7 1/2-ft. pipe
10-ft. hose
3 nozzles

The
Campbell-Hausfeld
Company
1103 State Ave.
Harrison, Ohio

Send prices and details as per advertisement in American Nurseryman for November 1.

Name _____ Post Office _____
Street _____ State _____

Prices Now Ready

BARTELDES

Evergreen and
Deciduous

TREE SEED

A complete list at
reasonable prices.

THE BARTELDES SEED CO.
Denver, Colorado

We are collectors of ROCKY MOUNTAIN EVERGREEN TREE SEEDS

Including:

PICEA PUNGENS. Colorado Blue Spruce.
PICEA ENGELMANNII. Engelmann's Spruce.
PICEA DOUGLASII. Douglas Fir.
BLACK HILLS SPRUCE.
ABIES CONCOLOR. Colorado Silver Fir.
PINUS PONDEROSA. Yellow Pine.
PINUS FLEXILIS. Limber Pine.
JUNIPERUS SCOPULORUM. Silver Cedar.
JUNIPERUS SCOPULORUM. Montana.

We are booking orders for new crop seed to be ready at suitable time.

Prices to the Trade are now ready.

THE COLORADO SEED CO.
1515 Champa St. Denver, Colo.